

**School of Accounting
Curtin University**

Global Corporate Social Responsibility Disclosure Practices

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**This thesis is presented for the Degree of
Doctor of Philosophy
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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

This thesis contains no material which has been accepted for award of any other degree or diploma in any university.

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Date:

Abstract

This thesis provides comparative evidence on corporate social responsibility disclosure (CSRD) practices by many of the world's largest companies. Specifically, it investigates the relationship between company characteristics, institutional factors, the presence of a voluntary assurance statement, and internal contextual aspects with the extent of CSRD in sustainability reports. The thesis approach is based on legitimacy theory tenets to better explain the motivations of these prominent companies to communicate CSRD.

The data collection focuses on the 2009 sustainability reports sourced from 460 highly visible public companies from 44 separate countries. Key Global Reporting Initiative (GRI) items are used as the benchmark disclosure checklist. The empirical results indicate that the average level of overall CSRD is 56.8 percent. Labour practices is the most disclosed theme by companies (66.4 percent) followed by economic (60.2 percent), society (57.0 percent), environmental (56.7 percent), human rights (49.0 percent), and product responsibility themes (46.0 percent).

Statistical analysis indicates that high-profile industries, the presence of a voluntary assurance statement and a corporate social responsibility committee positively influence the extent of corporate social responsibility disclosures. Interestingly, companies operating in emerging markets disclose more sustainability information than communitarian or Anglo-American jurisdictions. Consistent with legitimacy theory, these results suggest that companies which are more likely impacted by their community demonstrate higher accountability and transparency by increasing CSRD communication to better address stakeholders' expectations.

Overall, the empirical results have theoretical and practical implications for key stakeholders to improve drivers of CSRD. First, this thesis provides evidence that legitimacy theory can help explain the extent of corporate social responsibility disclosures. Second, this thesis adds new insights on the positive role of the voluntary assurance statements and corporate social responsibility committees in motivating companies to provide more extensive and higher credible sustainability reports.

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Abbreviations

ANOVA	Analysis of Variance
ASX	Australian Stock Exchange
CERES	Coalition for Environmentally Responsible Economies
CSR	Corporate Social Responsibility
CSRD	Corporate Social Responsibility Disclosure
EC	Economic
EN	Environmental
EPA	Environmental Protection Authorities
FTSE	Financial Times and London Stock Exchange
GHG	Green House Gas
GRI	Global Reporting Initiative
HR	Human Rights
IAASB	International Auditing and Assurance Standards Board
IASB	International Accounting Standards Board
ICB	Industry Classification Benchmark
IFAC	International Federation of Accountants
IFC	International Finance Corporation
ISO	International Organisation for Standardisation
ILO	International Labour Organisation
KLSE	Kuala Lumpur Stock Exchange
LA	Labour Practices
MNE	Multi National Enterprise
NGO	Non-Government Organisation
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PR	Product Responsibility
ROA	Return on Assets
SA	Social Accountability
SO	Society
TBL	Triple Bottom Line
TRI	Total Release Inventory
UN	United Nations
UNPRI	United Nations Principles for Responsible Investment
VESAD	Voluntary Environmental and Social Disclosure
VIF	Variance Inflation Factor
WRI	World Resources Institute

Related Thesis Publications

Refereed Publications

Faisal, F., G. Tower, and R. Rusmin. 2012. Legitimising Corporate Sustainability Reporting Throughout the World. *Australasian Accounting Business and Finance* 6 (2): 19-34.

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Faisal, F., G. Tower, and R. Rusmin. 2012. A cross-country study of social disclosure practices in sustainability reports. *Corporate Social Responsibility and Environmental Management*.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.0 Introduction

This thesis investigates the extent¹ of corporate social responsibility disclosure (CSRD)² of 460 highly visible public companies from 44 countries in their sustainability reports for the 2009 financial year. Using legitimacy theory, the thesis empirically examines the interaction of company characteristics, the presence of a voluntary assurance statement, institutional factors, and internal context variables, to explain variations in the extent of CSRD across jurisdictional business systems. Considering the interaction of these variables may help to assist in explaining why companies provide such extra voluntary communication. An index composed of 79 individual indicators from the Global Reporting Initiative (2006) is used to calculate the level of CSRD. Further, the findings of this thesis enable a better understanding of the factors that explain CSRD communication. For instance, this thesis provides insights into how the presence of a voluntary assurance statement and a corporate social responsibility (CSR) committee motivate companies to provide more credible sustainability reports.

This chapter is structured as follows. It begins by giving the background to the research, the research's questions and objectives, its significance,

¹The term 'extent' and is used interchangeably with 'level'.

²Corporate social responsibility disclosure (CSRD) is used synonymously with other terms such as sustainability reporting, citizenship reporting, social reporting, and triple bottom line (TBL) reporting. CSRD can be defined as "the provision of financial and non-financial information relating to an organisation's interaction with its physical and social environment as stated in the annual report or separate social reports" (Hackston and Milne 1996, 78). This definition covers six themes: economic, environmental, labour practices, human rights, society, and product responsibility (GRI 2006). The term CSRD is used throughout the thesis to describe the company's communication of their economic, social, and environmental activities and impacts of company.

assumptions and limitations, and an outline of the thesis. Section 1.1 outlines the issues relating to the development of corporate social responsibility disclosure (CSRD) studies. Section 1.2 provides the research questions and thesis's objectives. An explanation of the importance of the thesis is presented in Section 1.3, while Section 1.4 introduces the assumptions and limitations of this study. Section 1.5 gives an outline of the thesis, which is followed by a summary of this chapter.

1.1 Background

Recent rapid global transformation has seen an increased demand placed on corporations not only to perform financially but also to be good corporate citizens³. One of the most important aspects of this transformation is the growing importance of corporate social responsibility (CSR) activities (KPMG 2008). The increasing demand on companies to be more responsible is evidenced by the increased corporate social responsibility disclosures in many firms around the world (Bebbington, Larrinaga and Moneva 2008). CSRD typically comprises information about corporation's activities with regard to social and environmental issues such as environmental protection, labour practices, human rights, community involvement, and product responsibility (Gray et al. 2001). It also can be seen as a mechanism that corporations utilise in order to provide information to stakeholder groups and to demonstrate the extent to which corporate activities are consistent with the relevant public (Gray, Owen and Maunders 1987). The KPMG International Survey provides data that corporate social responsibility disclosure has gone mainstream, with nearly 80 percent of the largest 250 companies from 22 countries issuing stand-alone reports, up from about 50 percent in 2005 (KPMG 2008).

³Corporate citizenship can be defined as "the ways in which companies enact the strategies and operating practices that affect stakeholders and the natural environment, combined with the rights, duties and responsibilities that companies have to the societies in which they operate" (Waddock 2006, 22).

Past studies document that the extent of CSRD is closely associated with firm characteristics, as well as general contextual and internal factors (Gray, Kouhy and Lavers 1995; Adams 2002). However, beyond these factors, knowledge about the process that underlie the development of corporate social responsibility disclosure is still limited, as the extent and type of CSRD practices differ from country to country (Gao, Heravi and Xiao 2005; Chapple and Moon 2005; Aerts, Cormier and Magnan 2006; Baughn, Bodie and McIntosh 2007). Furthermore, most prior studies have been conducted in a single country setting. However, CSRD studies with data from a single country only face potential difficulties in linking their empirical results to the political, economic or cultural characteristics of broader jurisdictional units (Williams 1999). By contrast, the international comparisons made in this thesis offer deeper insights.

This thesis attempts to overcome the single-country limitations of previous research by comparing corporate social responsibility disclosure across jurisdictions. In particular, this thesis explores the extent of CSRD practices in emerging market countries, which have not received adequate attention in previous corporate social responsibility disclosure literature. More broadly, this thesis intends to look at the extent of global CSRD practices using a rich data set in 44 countries.

There has been international research examining institutional factors that may influence corporate social responsibility disclosure (see for example Williams 1999; Buhr and Freedman 2001; Newson and Deegan 2002; Holland and Foo 2003; Chapple and Moon 2005; Van der Laan Smith, Adhikari and Tondkar 2005; Xiao et al. 2005; Baughn, Bodie and McIntosh 2007; Orij 2010). These studies note that country/region, culture, the stage of nation's social and economic development and its legal and regulatory context are important determinants of the level and type of CSRD. However, these studies look at the influence of only institutional or

contextual factors on CSR. They tend to ignore the impact of internal factors that influence the extent of corporate social responsibility disclosure. As argued by Adams (2002) the internal processes of reporting, such as those used to make CSRs, may be influenced by the existence of internal entities such as a CSR committee.

This thesis extends past research by investigating the role of the corporate social responsibility committee. Specific internal organisational systems are vital to enable companies to adequately monitor changing societal expectations and to mitigate the risk associated with these (Rankin, Windsor and Wahyuni 2011). The presence of a CSR committee can be seen as a mechanism of legitimacy and reputation, as its role is to ensure that the company is managed in a socially responsible way and the stakeholder's expectations are addressed (Michelon and Parbonetti 2012). Hence, the presence of a CSR committee may potentially demonstrate a greater willingness and commitment to consider wider corporate social responsibility issues within the decision-making framework of the company (Kent and Monem 2008).

The emergence of and increase in corporate social responsibility disclosure reflects the increasing demand for corporate transparency. To enhance the level of CSR, various stakeholder groups are also demanding a voluntary assurance statement in companies' sustainability reports (Moroney, Windsor and Aw 2011). This thesis also examines the potentially related role of voluntary assurance statements in enhancing the level of CSR. Past studies in the corporate social responsibility disclosure literature have not given sufficient attention to the significance of the presence of a voluntary assurance statement. In summary, this thesis adds the literature by providing a clear theoretical framework for understanding the determinants of CSR.

To date, while there is no universal framework, a number of reporting frameworks have been developed to integrate CSR performance into a composite unified account. Despite the fact that these internationally recognized reporting frameworks differ in content and in the industry and region in which they are used, the Global Reporting Initiative (GRI) is one of the most important drivers of the quality of sustainability reports (Li et al. 2011). This thesis utilises the GRI Guidelines (2006) as the benchmark for disclosure checklist items.

The GRI is a comprehensive measurement that investigates all aspects of corporate social responsibility (GRI 2006; Rankin, Windsor and Wahyuni 2011). Godfrey and Hatch (2007) suggest that it is important for researchers to consider all aspects of CSR, such as economic, environmental, and social aspects. The GRI (2006) Guidelines consist of six themes. These are economic, environmental, labour practices, human rights, society, and product responsibility. All of these themes are considered relevant for this thesis as they enable a more detailed analysis of economic, social and environmental indicators.

1.2 Research Questions and Thesis Objectives

In order to improve the quality and quantity of corporate social responsibility disclosure, it is important to study not only the current extent and quality of CSRD practices, but also to investigate the factors influencing CSRD (Adams, Hill and Roberts 1998). Therefore, the key research questions of this thesis are:

- (1) What is the extent of corporate social responsibility disclosure (CSRD) across the sample?
- (2) What company characteristics, the presence of a voluntary assurance statement, institutional and internal factors, explain corporate social responsibility disclosure (CSRD) communication?

To answer these questions, this thesis pursues two objectives. The first is to provide comparative evidence about corporate social responsibility disclosure practices using data from a large number of companies from around the world; that is, to determine the extent to which corporate social responsibility disclosure varies across jurisdictions. The second is to analyse how company characteristics, the presence of voluntary assurance statements, institutional and internal factors account for corporate social responsibility disclosure.

1.3 Significance of the Thesis

This thesis makes several major contributions. First, previous studies of corporate social responsibility disclosure practices have almost solely focused on annual reports. Few cross-country studies have been conducted using sustainability reports. Past studies generally assume that annual reports contain a limited number of key social and environmental information. The KPMG survey in 2008 finds that some companies still integrate financial information with corporate social responsibility information in the one annual report. However, the annual reports a limited number and narrow range of CSR indicators and information (Frost et al. 2005).

Some past studies have shown that companies now rely more heavily on alternative media to communicate CSR information, such as discrete reports or the internet (Frost et al. 2005; Ho and Taylor 2007; Joshi and Gao 2009). Such studies' findings raise questions about the importance of the annual report as the main channel for conveying CSR information. The findings of Frost et al. (2005) posit that annual reports provide less insight into corporate social responsibility than stand-alone sustainability reports. Accordingly, this thesis focuses solely on sustainability reports as a better media source for capturing and analysing CSR information. This research

focus enables companies' corporate social responsibility disclosure details in sustainability reports to be more fully comprehended.

Second, this thesis explores the role of voluntary assurance statements increasing the level and credibility of disclosed information (Simnett, Vanstraelen and Chua 2009; Moroney, Windsor and Aw 2011). A great number of companies rely on assurance statements to improve the credibility and transparency of their CSR information. Over 60 percent of sustainability reports issued by companies in France, Spain, Korea, and Italy include such assurance statements (KPMG 2008). This raises questions about what drives companies to seek voluntary assurance statements on sustainability reports and, further, the extent to which the presence of a voluntary assurance statement changes the level of voluntary disclosure, such as CSRD. Despite more demand for assurance statements, research on the effect of such statements on corporate social responsibility disclosure is rare (Moroney, Windsor and Aw 2011). The empirical findings of this thesis will improve understanding of how the use assurance statements affects CSRD.

Third, this thesis looks at companies throughout the globe using a rich data set in 44 countries rather than merely looking at the corporate social responsibility disclosure in a single country, as has been the case in most past disclosure studies. However, it is difficult to determine the extent of regional or global CSRD with data from only a single country, because political, economic and national institutions or cultural characteristics of broader jurisdictional units differ (Adams, Hill and Roberts 1998; Williams 1999). Further, a multi-country sample allows for the introduction of country and/or jurisdictional specific effects as a significant institutional dimension (Aerts, Cormier and Magnan 2006, 302). Differences in the type of corporate governance systems (see for example Van der Laan Smith, Adhikari and Tondkar 2005), the type of business systems (see for

example Buhr and Freedman 2001; Chapple and Moon 2005), the type of legal system and the level of its enforcement (see for example Williams 1999; Buhr and Freedman 2001; Holland and Foo 2003), level of economic development (see for example Buhr and Friedman 2001; Xiao et al. 2005), and culture (Orij 2010) are the main sources of variations among jurisdictions. These element have potentially important ramifications on corporate social responsibility disclosure and overall corporate communication (Aerts, Cormier and Magnan 2006).

Fourth, this thesis analyses all types of corporate social responsibility disclosure rather than just a single social or environmental disclosure theme. Prior studies are often limited to very specific environmental or social aspects, and overlook elements of corporate social responsibility. This thesis utilises a more comprehensive measurement construct to better investigate corporate communication. By assesing all the types of CSRD, this thesis examines a broader set of values, issues, and processes that companies must address; it does this in order to more fully highlight their societal interactions (Ho and Taylor 2007).

Finally, this thesis contributes to future research and development in CSRD by testing legitimacy theory. Legitimacy theory seeks to understand what factors may cause variability in corporate social responsibility disclosures and to what extent the variables of interest within an organisation may influence organisational actions in seeking legitimacy (Haniffa and Cooke 2005). Deegan (2002) and Islam and Deegan (2008) argue that legitimacy theory is widely used to explain CSRD. They posit that corporate social responsibility disclosure in annual reports is best explained as a tool for maintaining legitimacy.

1.4 Assumptions and Limitations

This thesis has assumptions and limitations that are consistent with past empirical studies. First, there are so many variables that could be examined as proxies of firms' characteristics, institutional, and internal factors that may influence corporate social responsibility disclosure practices, that it is not at all possible to analyse all possible variants. Second, this thesis solely focuses on stand-alone sustainability reports. In doing so, it is assumed these documents provide economic, environmental, and social information. Third, it is assumed that the GRI⁴ indicators comprehensively cover all major aspects of corporate social responsibility. Fourth, this thesis assumes that the 79 indicators used as checklist benchmarks in the GRI (2006) are voluntary in each jurisdiction. Fifth, this thesis focuses on one period only (2009) and an English version of sustainability reports, which limits the generalisability for other time periods and the representation of countries in this thesis. Finally, since the disclosure index is developed based on the information disclosed in the stand-alone reports, it may reduce the number of companies that could be in the sample. This is a limitation in that it is likely that bigger firms will have stand-alone sustainability reports, therefore the sample may be biased towards larger firms.

This thesis employs a disclosure index to measure the extent of corporate social responsibility disclosures. It is assumed that each disclosure item is deemed equally important and therefore each item is awarded the same score when it is disclosed (Cooke 1991; Meek, Roberts and Gray 1995). Whilst, this could be questioned, any other form of weighting is fraught with problems of subjectivity. Moreover, the scoring approach gives a '1' if an item is disclosed and '0' if not disclosed, subject to the applicability of the item. This technique arguably loses the subtleties of different levels of

⁴ The Global Reporting Initiative (GRI) Framework (2006) is intended to serve as a generally accepted framework for reporting on an organisation's economic, environmental, and social performance (GRI 2006, 3).

disclosure of any item (Ho 2009, 205), but is justified and employed because it reduces subjectivity.

These assumptions and limitations are common to most quantitative accounting disclosure studies. Despite them, it is argued that deep insights will be generated from this research thesis.

1.5 Outline of the Thesis

This thesis comprises seven chapters and is organised as follows: Chapter 1 provides an introduction of the background to the research questions and objectives of the thesis, the significance of the thesis, its assumptions and limitations, and an outline of thesis. Chapter 2 presents the literature review of global corporate social responsibility disclosure (CSRD), various theoretical frameworks and the hypotheses development.

Chapter 3 discusses the research approach and the specific research methods of data collection, sample and sampling, measuring variables, model specification, and statistical testing. Chapter 4 reports the descriptive statistics and univariate analysis. Chapter 5 presents the multivariate analysis of the findings of the relationships between CSRD and the predictor variables, and the results of the hypotheses' testing and sensitivity analysis. Chapter 6 discusses the implications of the thesis's findings. Finally, Chapter 7 summaries the conclusions and suggests directions for future research.

1.6 Summary

This chapter provides an overview of the thesis. The research questions and objectives of this thesis are outlined, and its significance, assumptions and limitations are noted. The chapter ends with an outline of thesis to provide a more succinct overview of its organisation. The following chapter presents the literature review and hypotheses development.

CHAPTER TWO

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.0 Introduction

This chapter reviews the relevant literature in order to understand the research that has been conducted on corporate social responsibility disclosure (CSRD). Section 2.1 provides an overview of CSRD. Section 2.2 focuses on prior theoretical perspectives and determinants that have been used in CSRD studies. Section 2.3 reviews past studies of the motivations of companies to provide CSRD information. Section 2.4 presents the concepts and definitions of legitimacy. This is followed by Section 2.5, an outline of the formulation of the hypotheses to test the relationship between CSRD and predictor variables. Finally, Section 2.6 provides a summary of this chapter.

2.1 Overview of Corporate Social Responsibility Disclosure

Corporate social responsibility (CSR) is defined as a concept, programs, policies, and practice that has been applied and adapted to a wide variety of business contexts, and the economic, political, cultural and social relationships they have to the societies in which they operate (Baughn, Bodie and McIntosh 2007; Fukukawa 2010). Waddock (2006) defines CSR as the ways in which companies enact the strategies and operating practices that affect stakeholders and the natural environment, combined with the rights, duties and responsibilities that companies have to societies in which they operate.

Corporate social responsibility arises out of the relatively simple idea that corporations have obligations to society that extend beyond mere profit-making activities (Godfrey and Hatch 2007). CSR is driven by the need for social and environmental concerns to be included in businesses' decisions

and operations, and for the increased interaction of business with stakeholders (Van Marrewijk 2003). It relates to complex issues such as pollution, waste, resource depletion, and workers' treatment, the power of large corporations, local communities, product quality and safety (Gray, Owen and Maunders 1987; Branco Rodrigues 2006; Ho and Taylor 2007).

Many companies have sought to meet the growing demands for corporate social responsibility by producing corporate social and environmental reports. Corporate communication in the form of annual reports, stand-alone reports or websites is essential for stakeholders understanding companies and for companies to manage their external relationships (Joshi and Gao 2009). Communicating its CSR activities and performance effectively to its key stakeholders, such as customers, employees, investors, suppliers, and community groups, helps a company to build trust and credibility among these groups that matter most to them (KPMG 2008). Unerman (2008) adds that corporate social responsibility disclosure is a potentially powerful medium which corporations can use to try to influence the perceptions of stakeholders, thereby contributing toward maximizing the earning potential of their reputation.

There is growing evidence that companies are publicizing their corporate social responsibility credentials by providing more CSR information (Adams and Zutshi 2004; Adams and Frost 2007; Cooper and Owen 2007). An increase in the amount of corporate communication on corporate social responsibility disclosure as well as the breadth of material covered may be in response to greater public demands for a more socially responsible approach by corporations (Frost et al. 2005).

Corporate social responsibility disclosure has been defined by previous studies in a variety of ways. Gray et al. (2001, 329) argue that CSR disclosure can typically be thought of as comprising information relating to a corporation's

activities, aspirations, and public image with regard to environmental, community, employee, and consumer issues. The term corporate social responsibility disclosure (CSRD) is used throughout this thesis to describe a company's economic, social, and environmental impacts. Often-mentioned definitions for CSRD which combine social and environmental aspects are as follows:

Corporate social reporting is the process of communicating the social and environmental effects of organisations' economic actions to particular interest groups within society and to society at large. As such, it involves extending the accountability of organisations (particularly companies), beyond the traditional role of providing a financial account to the owners of capital, in particular, shareholders. Such an extension is predicated upon the assumption that companies do have wider responsibilities than simply to make money for their shareholders (Gray, Owen and Adams 1996, 3).

Voluntary environmental and social disclosure (VESAD) as information voluntarily provided by organisations related to their activities, programs and application of resources deemed to affect the public. These disclosures extend beyond traditional financial accounting, encompassing details related to employees, products and consumers, community services and environmental impact, prevention and reduction (Williams 1999, 231).

Corporate social disclosure is the provision of financial and non-financial information relating to a company's interaction with its physical and social environment as stated in corporate annual reports or corporate social reports (Hackston and Milne 1996, 78).

Further, the GRI (2006, 3) defines corporate social responsibility disclosure as "the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organisational performance towards the goal of sustainable development". This thesis adopts the definition given by the GRI (2006) because it is broader than other definitions and it clearly covers six themes (financial and non-financial performance), which are economic, environmental, labour practice, human rights, society, and product responsibility. Moreover, this

definition emphasises qualitative and quantitative measurements and it also considers wider stakeholder groups.

As an attempt to codify best practice reporting, several bodies have been active in developing corporate social responsibility disclosure guidelines. Examples are the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises; the United Nations (UN) Global Compact; the United Nations Principles for Responsible Investment (UNPRI); the Coalition for Environmentally Responsible Economies (CERES) Principles; the International Organisation for Standardisation (ISO) 26000, and the Social Accountability (SA) 8000 standard. At an international level, the Global Reporting Initiative (GRI) is arguably the most dominant influencing agent (Ballou, Heitger and Landes 2006). The GRI's sustainability reporting guidelines are the most notable guidelines. They are comprehensive, respected and accepted as representing current best practice for CSRD (Deegan 2006; Christopher and Filipovic 2008).

This thesis uses the Global Reporting Initiative (2006) Guidelines version⁵ (G3) for several reasons. First, the guidelines are a globally accepted framework (Frost et al. 2005; Cahaya et al. 2011). Second, the GRI (2006) framework is considered the most comprehensive reporting guideline and has gained widespread credibility through a rigorous, global multi-stakeholder feedback process (Li et al. 2011). It provides a structure for the base content of reporting (Bouten et al. 2011). Finally, the GRI (2006) framework informs organisations about how they can disclose their sustainability performance. It does this through guidelines, protocols,

⁵The Global Reporting Initiative (GRI) Guidelines are first published in 1999. The second version (G2) is launched in 2002 and the third version (G3) in 2006. The current guidelines (G3.1) are published in 2011, and the next version (G4) will be launched in 2013. As this study uses 2009 sustainability reports, the GRI (2006) Guidelines version G3 is the most relevant disclosure benchmark.

sector supplements, detailed lists of performance metrics and other disclosure indicators (Li et al. 2011). As noted by GRI (2006), the overall goals of the guidelines are to enhance the quality, rigor, and utility of CSRD.

The 2006 guidelines (G3) comprise three main parts, these being:

1. *Reporting principles*. The principles are intended to help achieve transparency – a value and a goal that underlies all aspects of CSRD. There are a number of reporting principles, these being:
 - a. *Materiality*. The information in a report should cover topics and indicators that reflect the organisation's significant economic, environmental, and social impacts or that would substantively influence the assessments and decisions of stakeholders.
 - b. *Stakeholder inclusiveness*. The reporting organisation should identify its stakeholders and explain in the report how it has responded to their reasonable expectations and interests.
 - c. *Sustainability context*. The report should present the organisation's performance in the wider context of sustainability.
 - d. *Completeness*. The coverage of the material topics and indicators and the definition of the report's parameters should be sufficient to reflect significant economic, environmental, and social impacts and enable stakeholders to assess the reporting organisation's performance in the reporting period.
2. *Reporting guidance*. The purpose of reporting guidance is to control the power to govern the financial and operating policies of an enterprise and to participate in the financial and operating policy decisions of the entity but not the power to control those policies.
3. *Standard disclosures*. The standard disclosures are intended to specify the base content that should appear in the sustainability report. The disclosures are divided into three sections:

- a. Strategy and profile. Disclosures that set the overall context for understanding organisational performance such as its strategy, profile, and governance.
- b. Management approach. Disclosures that cover how an organisation addresses a given set of topics in order to provide the context for understanding performance in a specific area.
- c. Performance indicators. Indicators that elicit comparable information on the economic, environmental, and social performance of the organisation (GRI 2006; Deegan 2007).

In relation to the management approach and performance indicators, the GRI section on sustainability performance indicators is classified into economic, environmental, and social categories. These are considered to be three critical categories. Social indicators are further categorised by labour practices, human rights, society, and product responsibility (GRI 2006).

Further, the economic, environmental, and social performance indicators can each be broken down into two categories, namely core and additional performance indicators (see Chapter 3 for further details). Core performance indicators are intended to identify generally applicable indicators and are assumed to be material for most organisations. While, additional performance indicators represent emerging practice or address topics that may be material for some organisations, but are not material for others (GRI 2006).

2.2 Prior Theoretical Perspectives and Determinants in CSRD Studies

Several theories attempt to explain corporate social responsibility disclosure practices. Gray, Kouhy and Lavers (1995) argue that empirical investigations of CSRD practices have utilised a very wide variety of literature that draws upon many different theoretical perspectives. These

theoretical frameworks are agency theory, political economy theory, legitimacy theory, stakeholder theory, and institutional theory (Deegan 2006, 272). A selection of works that use each of these theories is listed in Table 2.1 below.

Some previous studies have used political economy theory (see for example Williams 1999; Amran and Devi 2007), legitimacy theory (see for example Adams, Hill and Roberts 1998; Cormier and Gordon 2001; Patten 2002; Newson and Deegan 2002; Ahmad and Sulaiman 2004; Haniffa and Cooke 2005; Magness 2006; Van Staden and Hooks 2007; Branco and Rodrigues 2008; Aerts and Cormier 2009; Faisal, Tower and Rusmin 2012a, 2012b), stakeholder theory (see for example Roberts 1992; Van der Laan Smith, Adhikari and Tondkar 2005; Eljido-Ten 2007; Cahaya, Porter and Brown 2008; Brammer and Pavelin 2008; Gunawan 2010; Orij 2010; Michelon and Parbonetti 2012), and institutional theory (see for example Rahaman, Lawrence and Roper 2004; Aerts, Cormier and Magnan 2006; Amran and Haniffa 2011; Cahaya et al. 2011) to explain determinants of corporate social responsibility disclosure.

Current studies have also employed multiple other theoretical lenses in explaining corporate social responsibility disclosure practices (see for example Rankin, Windsor and Wahyuni 2011; Coetzee and Van Staden 2011; Mahadeo, Hanuman and Soobaroyen 2011). Legitimacy theory is widely used to explain the motivations and determinants of companies that engage in CSR (see Table 2.2). Consistent with Deegan (2002), Table 2.1 and Table 2.2 show that corporate social responsibility disclosure is most relevant explained as a tool for maintaining legitimacy. This thesis thus utilises legitimacy theory as the theoretical framework to explain variations incorporate social responsibility disclosure practices.

The growing amount of accounting research in the corporate social responsibility disclosure area has generally focused on the extent and determinants of CSRD in a single country (see for example Trotman and Bradley 1981; Teoh and Thong 1984; Cowen, Ferreri and Parker 1987; Belkaoui and Karpik 1989; Patten 1991; Ness and Mirza 1991; Roberts 1992; Patten 1991; Hackston and Milne 1996; Deegan and Gordon 1996; Neu, Warsame and Pedwell 1998; Tsang 1998; Cormier and Gordon 2001; Patten 2002; Cormier and Magnan 2003; Al-Tuwaijiri, Christensen and Hughes 2004; Haniffa and Cooke 2005; Cormier, Magnan and Van Velthoven 2005; Gao, Heravi and Xiao 2005; Naser et al. 2006; Nurhayati, Brown and Tower 2006; Magness 2006; Branco and Rodrigues 2008, 2008a; Clarkson et al. 2008, Said, Zainuddin and Haron 2009; Reverte 2009; Rankin, Windsor and Wahyuni 2011; Coetzee and Van Staden 2011; Mahadeo, Hanuman and Soobaroyen 2011). On the international front, research is now examining the institutional factors that influence CSRD (see for example Adams, Hill and Roberts 1998; Williams 1999; Buhr and Freedman 2001; Newson and Deegan 2002; Holland and Foo 2003; Welford 2005; Chapple and Moon 2005; Van der Laan Smith, Adhikari and Tondkar 2005; Xiao et al. 2005; Baughn, Bodie and McIntosh 2007; Ho and Taylor 2007; Aerts and Cormier 2009). These studies have concluded that country of origin (Newson and Deegan 2002; Van der Laan Smith, Adhikari and Tondkar 2005), cultural and institutional factors (Buhr and Freedman 2001), the stage of a nation's social and economic development (Chapple and Moon 2005; Xiao et al. 2005), legal and regulatory context (Holland and Foo 2003), and jurisdictional business systems (Faisal, Tower, and Rusmin 2012a, 2012b) are important determinants of the level and type of corporate social responsibility disclosure. Baughn, Bodie and McIntosh (2007) argue that the relationship between corporate social responsibility disclosure and a country's economic, political, and social contexts reflects the importance of a

country having the requisite institutional capacity to promote and support corporate social responsibility disclosure practices.

Table 2.1 provides a summary of past studies with regard to the determinants of and theories applied to CSRD. This review is intended to develop the direction and the key of areas examination of this thesis by integrating many prior studies which have examined the effect of specific of company characteristics with companies operating in a single and/or multiple country from a single or multiple theories. These studies are presented in order from the oldest to the most recent.

Table 2.1 Prior Theoretical Perspectives and Determinants in CSRD Studies

Study	Sample of Study	Theory	Determinants of CSRD
Trotman and Bradley (1981)	207 Australian firms	Not specified	Size, social pressures, management decision
Teoh and Thong (1984)	100 Malaysian firms	Not specified	Size, country of origin, ownership
Cowen, Ferreri and Parker (1987)	134 US firms	Not specified	Size, industry
Belkaoui and Karpik (1989)	23 US firms	Not specified	Leverage, size, systematic risk, ROA
Andrew et al. (1989)	119 Malaysian and Singaporean firms	Not specified	Size
Patten (1991)	156 Fortune 500 firms	Legitimacy	Size, industry
Ness and Mirza (1991)	131 UK firms	Agency	Industry
Roberts (1992)	130 Fortune 500 firms	Stakeholder	Political committee, leverage, public affairs staff, philanthropic, ROE, risk, age, industry
Hackston and Milne (1996)	47 New Zealand firms	Not specified	Size, industry
Deegan and Gordon (1996)	197 Australian firms	Not specified	Size , industry type
Tsang (1998)	17 Singaporean firms	Not specified	Industry
Adams, Hill and Roberts (1998)	150 firms from 6 countries	Legitimacy	Size, industry, country of domicile
Williams (1999)	356 firms from 7 countries	Political economy	Culture, political & civil system, size, industry
Moneva and Llana (2000)	160 Spanish firms	Stakeholder	International operations
Buhr and Freedman (2001)	248 US and Canadian firms	Not specified	Culture, institutional factors
Cormier and Gordon (2001)	3 Canadian firms	Legitimacy	Ownership status, size
Newson and Deegan (2002)	150 multinational firms	Legitimacy	Country of origin, industry
Patten (2002)	122 US firms	Legitimacy	Media
Gao, Heravi and Xiao (2005)	33 Hong Kong firms	Not specified	Size, industry
Cormier, Magnan and Van Velthoven (2005)	337 German firms	Institutional	Risk, ownership, fixed assets, size, age
Haniffa and Cooke (2005)	160 Malaysian firms	Legitimacy	Culture, governance characteristics, size, multiple listings, industry, profitability

Table 2.1 (continued)

Study	Sample of Study	Theory	Determinants of CSRD
Van der Laan Smith, Adhikari and Tondkar (2005)	58 firms from US, Denmark, Norway	Stakeholder	Country of origin
Magness (2006)	44 Canadian firms	Legitimacy	Size, external financing, press releases
Ho and Taylor (2007)	50 Japanese & US firms	Not specified	Size, profitability, leverage, industry
Clarkson et al. (2008)	191 US firms	Socio political	Economic performance
Brammer and Pavelin (2008)	450 UK firms	Not specified	Size, industry
Branco and Rodrigues (2008)	12 Portuguese firms	Legitimacy	Size
Kent and Monem (2008)	22 Australian firms	Not specified	Media, audit committee, CSR committee
Joshi and Gao (2009)	49 multinational firms	Not specified	Size, profitability
Liu and Anbumozhi	175 Chinese firms	Not specified	Government power, size
Aerts and Cormier (2009)	158 firms from US and Canada	Legitimacy	Industry, leverage, media exposure, environmental performance
Da Silva M and Aibar-Guzman (2009)	109 Portuguese firms	Not specified	Size, quotation on the stock market
Reverte (2009)	46 Spanish firms	Not specified	Size, industry, media
Orij (2010)	600 firms from 22 countries	Stakeholder	Culture
Dilling (2010)	124 firms from 25 countries	Not specified	Size, governance committee
Islam and Deegan (2010)	2 multinational firms	Legitimacy, media-agenda	Media
Rankin, Windsor and Wahyuni (2011)	187 Australian firms	Institutional governance theory	Governance, Environmental Management System, size, industry
Coetzee and Van Staden (2011)	19 South African firms	Stakeholder, Legitimacy, media-agenda	Size, risk, social performance, number of fatalities
Mallin and Michelon (2011)	100 KLD firms	Legitimacy	CSR committee, CEO duality, multiple directorships

As highlighted in Table 2.1, Trotman and Bradley (1981) investigate why companies provide corporate social responsibility information and examine association between characteristics of companies (size, systematic risk, social pressures and management's decision horizon) and corporate social responsibility disclosure. They look at 207 firms listed on the Australian Stock Exchange (ASX). Their results demonstrate that companies which provide CSR information are on average, larger in size and have a higher systematic risk. In addition, their results show that there is a positive association between company size, degree of social pressures and long-term decisions-making and the amount of CSRD.

Teoh and Thong (1984) examine corporate social responsibility disclosure 100 Malaysian companies using the questionnaire survey approach. They also use personal interviews with senior management to obtain information regarding aspects of corporate social performance and reporting, namely social awareness and social involvement. They find that most of the companies interviewed state that they focus on social involvement, specifically relating to employees and product/services. Their results show that company size, country of origin, and corporate ownership have a significant impact on the extent of CSRD.

Cowen, Ferreri and Parker (1987) test the relationship between corporate characteristics (size, and industry type) and the propensity to disclose types of CSR information. A sample of 134 US Fortune 500 companies operating in ten industries is used. Their results show that corporate size has a significant impact upon environment, energy, fair business practice, community involvement and other disclosures. Industry category also appears to have influenced on energy and community involvement communication.

Belkaoui and Karpik (1989) investigate the relationship between a firm's social disclosure, social performance and economic performance. Using 23 of the US's leading companies, they find that there is a significant and positive association between social disclosure and social performance, social disclosure and political visibility (i.e. size and systematic risk), and a negative association between social disclosure and contracting and monitoring costs (measured by leverage).

Andrew et al. (1989) provide evidence about corporate social responsibility disclosure practices in Malaysia and Singapore. Using 119 annual reports of publicly-listed companies for the year ending 1983, they find that the level of CSR in both countries is 26 percent. Large and medium size companies disclosed more social information than small companies. Moreover, they note the human resources are the main type of social information disclosed by companies.

Patten (1991) studies corporate social responsibility disclosure through the lens of legitimacy theory. He examines whether CSR relates to public pressure and firm profitability. the level of CSR is measured by counting the number of pages of disclosure in the annual report for each seven themes: the environment, energy, fair business practices, human resources, community involvement, products, and other disclosures. The public pressure variable is measured by firm size and industry classification. 156 US companies listed on the Fortune 500 in 1985 are utilised as his sample. The results reveal that size and industry are significant predictor variables as determinants of CSR US company.

Ness and Mirza (1991) utilise agency theory to test the relationship between environmental disclosures and type of industry. Focusing on 131 leading UK companies in 1984, their results indicate that there is a positive association between environmental disclosure and type of industry. In

addition, they argue that oil companies disclose more environmental issues as they are perceived to be damaging the environment, thus their managements place a heavier emphasis on environmental disclosure in annual reports.

Roberts (1992) empirically tests the determinants of corporate social responsibility disclosure. Stakeholder power, strategic posture, and a company's past and current economic performance are used to explain the level of correlation between CSRD and economic performance. Three stakeholder power variables included are: percentage of ownership in the firm held by management and shareholders holding more than 5 percent of common stock, amounts contributed by the firm to its corporate political action committee, and average debt to equity ratio. Two strategic posture variables included are the average number of public affairs staff employed by the firm and the sponsorship of a philanthropic foundation by the firm. Economic performance is measured by the average annual change in return on equity (ROE) and systematic risk. By using a sample from 130 large Fortune 500 companies, Roberts marshals strong evidence that the intensity of stakeholder power, strategic posture, and economic performance can predict or explain CSRD.

Hackston and Milne (1996) provide a description of New Zealand companies' corporate social responsibility disclosure practices. They examine the determinants of CSRD among these companies (size, industry, profitability, and country of ownership). Using the largest 47 companies listed on the New Zealand Stock Exchange in 1992 as their sample. Six types of social disclosure are used to measure the extent of CSRD. The six categories are environment, energy, employee health and safety, employee other, products, and community involvement. Their results show that size, industry, and country of ownership are determinants of CSRD.

Deegan and Gordon (1996) explore the environmental disclosure practices of 197 Australian companies from 1981 to 1991. They find that, first, the amount of environmental disclosure in Australia is low, on average 186 words. Second, in the period of 1988 to 1991 there is an increase in environmental disclosure which they posit is caused by an increasing number of companies. Finally, they find that there are statistically significant relationships between the size of company, industry type and the level of environmental disclosure.

Tsang (1998) uses a longitudinal study of corporate social responsibility disclosure in Singapore, based on 17 companies from three industries, namely banking, food and beverages, and hotel. The period covered is 1986 to 1995. His study uses four specific social responsibility themes—namely, the environment, human resources, community involvement, and other category. The results show that most information disclosed is in the areas of human resources and community. In addition, the industry type affects the level of CSRD. For example, the banking industry have the highest of proportion of companies disclosing corporate social responsibility information followed by food and beverages and then hotels.

Adams, Hill and Roberts (1998) identify factors that influence the corporate social responsibility disclosure of 150 firms in six European countries in 1993. These countries are France, Germany, the Netherlands, Sweden, Switzerland, and the UK. The content analysis approach is used to measure the extent of CSRD. Legitimacy tenets are employed to explain the motivation of firms to disclose their corporate social responsibility disclosure practices. Their results show that the extent of CSRD is positively related to the size of firm and the type of industry.

Using samples from seven Asia-Pacific countries, Williams (1999) looks at the corporate social responsibility disclosure practices of 356 firms from Australia, Singapore, Hong Kong, the Philippines, Thailand, Indonesia, and Malaysia for the year 1994. Five themes of CSRD, namely the environment, energy, human resources, products and customers, and community involvement are analysed by content analysis to measure the extent of CSRD in each country. His findings indicate that the extent of CSRD is negatively related to culture (uncertainty avoidance and masculinity) and political system. His results also show that size and industry type affect the extent of CSRD.

Buhr and Freedman (2001) explore the role of culture and institutional factors on voluntary environmental disclosure. Using a longitudinal approach, they compare the environmental disclosure of 56 Canadian and US firms in 1988 and 68 firms (in each country) in 1994. Using content analysis methods, they measure the level of environmental disclosure in four areas: legal events and/or capital expenditure (costs), emissions, management, and miscellaneous. The results show that the extent of environmental disclosure of Canadian firms is higher than US firms both in the year 1988 and in the year 1994. They argue that the differences in the level of disclosure are affected by political system and business climate.

Newson and Deegan (2002) look at corporate social responsibility disclosure practices in Australia, Singapore, and South Korea. Specifically, they examine whether large multinational corporations adopt similar CSRD policies and if not, whether the dissimilarities are affected by country of origin and industry of operation. Using 149 large multinational firms, they investigate the extent of CSRD in eight themes, namely environmental, energy, diversity, fair business practices, human resources, community involvement, products, and other. Their results find that the extent of CSRD is 19 percent. Human resources have the highest levels of

disclosure by companies, followed by community involvement. As for disclosure in each country, they find that the level of CSRD of Australian firms is the highest, followed by Singapore and South Korea. Australian firms provide the highest disclosure for health and safety; while Singapore firms have the highest levels of disclosure for training and empowering employees. South Korean firms disclose most about protecting the environment from their operations and products. The authors conclude that country of origin and industry of operation as the main determinants of corporate social responsibility disclosure.

Gao, Heravi and Xiao (2005) investigate the determinants of corporate social responsibility disclosure in 154 annual reports of 33 Hong Kong listed companies from 1993 to 1997. Their research find that industry and firm size have an impact on the level of disclosure. Cormier, Magnan and Van Velthoven (2005) identify determinants of corporate environmental disclosures. Their sample comprises 304 firm year observations of seventy six large German companies from 1992 to 1998. Results show that risk, ownership, fix assets age, and firm size determine the level of environmental disclosures.

Haniffa and Cooke (2005) explore corporate social responsibility disclosure practices in Malaysia for the years 1996 and 2002. They use a sample of 160 non-financial companies listed on the Kuala Lumpur Stock Exchange (KLSE) in 1996. Content analysis and a disclosure index approach are used to measure the extent of CSRD. Their results indicate that there is a significant difference in the extent and variety of CSRD in Malaysian non-financial companies' annual reports. In addition, their results show that there is a significant difference in the themes of CSRD (the environment, employees, community, and products). Regarding the level of CSRD, the results indicate scores of 16.3 percent in 1996 and 17.1 percent in 2002. The multivariate tests show that culture and

corporate governance significantly impact on the extent of corporate social responsibility disclosure.

Van der Laan Smith, Adhikari and Tondkar (2005) investigate the differences in corporate social responsibility disclosure between 32 Norwegian/Danish firms and 26 US firms in the electric power generation industry. From a stakeholder perspective, they investigate several factors that influence the stakeholder–firm relationship and identify whether countries with different emphasis (stakeholder orientation versus shareholder orientation) have a different levels and quality of corporate social responsibility disclosure in their annual reports. They hypothesize that firms in countries with a stakeholder orientation will provide a higher level and quality of CSRD than firms in countries with a shareholder orientation. Based on the content analysis approach, they measure the level of CSRD in annual reports from 1998 and 1999. The analysis centres on six themes: community involvement, environmental practices, consumer relations, human resources, product safety, and shareholder rights. Their results support their hypotheses and they conclude that country of origin is an important predictor of such corporate social responsibility communication.

Ho and Taylor (2007) investigate the triple-bottom-line (TBL) disclosure of US and Japanese firms. They sample 50 of the largest firms in these countries for the period of 2003. Twenty disclosure items from three themes are considered: economic, environmental, and social. These are explored in annual reports, stand-alone reports, and website reports by using Global Reporting Initiative (GRI) Guidelines (2002) as checklist items. They also examine the determinants of TBL disclosure. The results indicate that the extent of TBL disclosure (in all three themes) is greater for Japanese firms than for US firms. Their results also indicate that the level of TBL disclosure is higher for firms that are larger, have lower

profitability and liquidity, and are in the manufacturing industry. Overall, they conclude that the extent of TBL disclosure is primarily driven by non-economic factors.

Clarkson et al. (2008) provide empirical evidence of the relationship between corporate environmental performance and the level of environmental disclosure for 191 US companies in 2003. Their sample focuses on five industries, namely pulp and paper, chemicals, oil and gas, metals and mining, and utilities. Environmental performance is measured by the percentage of total toxic waste and the ratio of total release inventory (TRI) to total firm sales. A disclosure index based on 95 items is used to measure environmental disclosure. Twenty items relate to soft disclosure and 75 items relate to hard disclosure, each of which refers to the Global Reporting Initiative (GRI) Guidelines (2002) as the benchmark of disclosure. The results indicate that a positive relationship between environmental performance and the level of environmental disclosure.

Brammer and Pavelin (2008) examine factors influencing the quality of corporate environmental disclosure of 450 large UK companies. Their findings show that high quality environmental disclosures are primarily associated with larger firms and those in sectors most closely related to environmental sectors. Kent and Monem (2008) examine the factors that determine the implementation of triple-bottom-line (TBL) reporting in 22 Australian companies. Their results provide evidence that adverse media coverage, audit committees, and the presence of sustainable development committees are positively related to TBL reporting.

Joshi and Gao (2009) investigate the determinants of 49 multinational corporations' CSR for the year 2005. They identify a strong relationship between disclosures of social information and (a) firm size and (b) profitability of the company. Liu and Anbumozhi (2009) identify the

determinants of the corporate environmental disclosures of 175 Chinese listed companies in 2006. Their main findings show that government power and firm size are associated with environmental information disclosures.

Da Silva Monteiro and Aibar-Guzman (2009) examine factors that explain the extent to which 109 large companies operating in Portugal during the period 2002–2004 disclose environmental information. They find that firm size and stock exchange listing are positively related to the extent of environmental disclosures. Reverte (2009) analyses whether company characteristics and media exposure are determinants of the corporate social responsibility disclosure practices of the 46 largest Spanish public companies in terms market capitalization for the period of 2005 to 2006. The level of CSRD is measured by ratings. The results indicate that larger firm size, more sensitive industries, and higher media exposure lead to higher ratings of CSRD. Dilling (2010) investigates the impact of company characteristics on the CSRD practices of 124 companies from 25 countries. His findings demonstrate that firm size and the presence of a governance committee are associated with corporate social responsibility disclosure.

Based on the review of past studies provided in Table 2.1 it can be concluded that company characteristics such as firm size, industry type, leverage, profitability, age, risk, ownership, and corporate governance are often significant determinants of corporate social responsibility disclosure.

Gray, Kouhy and Lavers (1995) conduct a longitudinal study of UK companies' disclosures from 1979 to 1991. They draw several conclusions. First, corporate social responsibility does not always appear to be a systematic activity. Second, CSR and profitability do not occur in the same period. Third, CSR is related to company size. Fourth, there is

some evidence of industry effects. Fifth, the country in which the organisation is reporting and the country of ultimate ownership seem to have a significant effect. Finally, there would appear to be a number of characteristics which may be related to predisposition to communicate corporate social responsibility disclosure data. These include capital intensity, age of the corporation, strategic posture, and the existence of a social responsibility committee.

Adams (2002, 224) classifies the determinants of corporate social responsibility disclosure into three categories:

1. Corporate characteristics (including firm size, industry group, financial/economic performance and share trading volume, price and risk).
2. General contextual factors (including country of origin, time, specific events, media pressure, stakeholders and social, political, cultural and economic context).
3. The internal context (including identity of company chair person and existence of a social responsibility committee).

This thesis examines determinants as described by Gray, Kouhy and Lavers (1995) and Adams (2002). However, it expands on general contextual factors by including a focus on the jurisdictional variable. Another important new variable considered in this thesis is the presence of a voluntary assurance statement in a sustainability report.

In summary, firm size, industry type, the presence of a voluntary assurance statement, jurisdictional business systems, the presence of a corporate social responsibility committee, profitability, and leverage are tested in this thesis as possible predictors of corporate social responsibility disclosure.

2.3 Motivations for CSRD

Adams and Zutshi (2004) argue that there are two key drivers for companies to act in a socially responsible way and to be accountable for their activities. First, a recognition of the power that companies possess and an acceptance by these companies that they have broader responsibilities than simply earning money for their shareholders. Second, a recognition that it is in a business's interest to externally report (for example to build trust, improve their image and/or to minimise risks). Companies are likely to engage in corporate social responsibility activities and disclosure because of these two different kinds of motivations (Branco and Rodrigues 2008a). Some companies expect that having good relations with their stakeholders will lead to increased financial returns, by assisting them to develop valuable intangible assets (resources and capabilities). These assets can be sources of competitive advantage because they can differentiate a company from its competitors. Other companies engage in CSR activities and disclosure to conform to stakeholder norms and expectations about their operations (Branco and Rodrigues 2008a).

Previous studies on corporate social responsibility disclosure have provided different explanations of the motivations of companies that disclose their CSR information (Islam and Deegan 2008). For example, Patten (1992) uses legitimacy theory to examine the effect of the Exxon Valdez oil spill on the environmental disclosure in annual reports. He examines 23 publicly listed companies on the Fortune 500 list in 1988 and 1989. His results show that there is an increase variation in the change in the amount of environmental disclosure in company's annual reports. His finding supports legitimacy theory, namely that companies use corporate social responsibility information to legitimate their activities.

Deegan and Rankin (1996) investigate the environmental disclosure practices of 20 Australian companies which were subject to successful prosecution by the New South Wales and Victorian Environmental Protection Authorities (EPA) during the period of 1990–1993. The authors use legitimacy theory to explain whether there are variations in environmental disclosure around the time of the proven EPA prosecution. Their results show that:

Organisations appear reluctant to provide any information within their annual reports about any negative environmental implications of their operation...firms which have been prosecuted believe that there is a need to counter negative news of their prosecution with positive news about their environmental initiatives. That is, it appears that they believe there is a need to legitimise the existence of their operation, the legitimisation endeavour taking the form of increased disclosure of positive, or “good” environmental news (p.59).

Brown and Deegan (1998) use legitimacy theory to examine the relationship between media coverage and the extent of the environmental disclosure of 27 Australian companies from nine industries (chemicals, forestry and forest products, gold, oil and gas, other metal, pastoral and agricultural, sand mining, solid fuels and uranium) between 1981 and 1994. Their results indicate that there is a relationship between media coverage and environmental disclosure. They argue that a change in the level of media coverage indicates that companies have a motive to legitimise their activities and that this confirms legitimacy theory.

Deegan, Rankin and Voght (2000) review the disclosures of Australian firms in their annual report, in response to five major social incidents, namely the Exxon Valdez disaster, the Union Carbide disaster, the Kirki oil spill, the Moura Mine disaster, and the Iron Baron disaster. They examine how these companies respond to the perceived threats to their legitimacy posed by these incidents. The extent of disclosure is measured in four themes: environmental, health and safety, community, and human

resource. Their findings indicate that companies do appear to change their disclosure policy around the time of major company and industry-related social events. This, in turn indicates that management considers that annual report corporate social responsibility disclosure is a useful device to reduce the effects upon a corporation of events that are perceived to be unfavourable to its image.

O'Donovan (2002) extends the applicability and predictive power of legitimacy theory. He investigates the extent to which annual report disclosures are related to attempt to gain, maintain, and repair legitimacy. He analyses three large Australian public companies. By using the quasi-experimental method and semi-structured interviews, he finds that the decision of companies to disclose environmental issues in their annual report can be explained by legitimacy theory.

Deegan, Rankin and Tobin (2002) look at the corporate social responsibility disclosure of Broken Hill Proprietary (BHP) Limited from 1983 to 1997. There are three issues regarding their study. As well as investigating the extent of social and environmental disclosure over the period, they consider what type of information the annual reports disclosed. Finally, they seek to ascertain whether social and environmental disclosure can be explained by the concepts of a social contract and legitimacy theories. The extent of disclosure is measured for five themes: environment, energy, human resources, community involvement, and other. Their results provide further evidence that managers communicate CSR information in their annual report to legitimise their operations.

Cho and Patten (2007) test whether financial environmental disclosure is used as a legitimising tool. Using 100 US public companies listed for the year 2002, they find that companies which operated in sensitive industries

tend to display higher non-monetary disclosure than companies operating in non-sensitive industries. Moreover, they also find that for firms in sensitive industries, the extent of monetary disclosure is higher for worse environmental performers than for better performers. Based on their findings, Cho and Patten (2007) argue that companies use financial environmental disclosure as a legitimising tool.

By means of a longitudinal case study, Tilling and Tilt (2010) look at the corporate social responsibility disclosures made in tobacco company Rothmans's annual reports over a forty year period (1956-1999). As in the studies above, their study seek to examine the appropriateness of legitimacy theory in explaining CSRD in annual reports. Their results indicate that there is a legitimacy motivation, at least in part, underlying the CSRDs in annual reports.

Table 2.2 provides summaries past studies the motivations of companies that make corporate social responsibility disclosures.

Table 2.2 Motivations: Why Companies Provide Corporate Social Responsibility Disclosure (CSR D)

Study	Focus of Study	Findings
Ness and Mirza (1991)	Test the relationship between CSR D and industry	CSR D is used to increase management welfare.
Patten (1992)	Examination of the effect of the Exxon Valdez oil spill on the environmental disclosure.	Environmental disclosure is used to legitimate the firm's activities.
Deegan and Gordon (1996)	Analyse environmental disclosure practices of Australian firms.	Environmental disclosure is used to legitimize the operations of firms.
Deegan and Rankin (1996)	Investigation of the environmental disclosure practices	Companies use environmental disclosure to manage their image.
Neu, Warsame and Pedwell (1998)	Investigation of the influence of external pressures on environmental disclosure	Companies communicate environmental disclosure via annual reports to manage the publics' impression.
Brown and Deegan (1998)	Investigation of the relationship between media's attention to environmental performance and environmental disclosures.	The environmental disclosure is associated with the extent (variations) of media attention.
Tilt and Symes (1999)	Investigate environmental disclosure of Australian companies.	Environmental disclosure is motivated by tax legislation.
Deegan, Rankin and Voght (2000)	Examination of the reactions of Australian firms to five major social incidents.	Disclosure is a means of influencing society's perception and of legitimising a company's ongoing existence.
Wilmshurst and Frost (2000)	Analyse the link between specific factors and environmental disclosure	Managements disclose more environmental data in order to respond to stakeholders.
Deegan, Rankin and Tobin (2002)	Examination of the CSR Ds of BHP.	Managements release positive CSR Ds to respond to unfavourable media attention.
O'Dwyer (2002)	Explain managerial perceptions of CSR D	CSR D may occasionally form part of a legitimacy process.
Patten (2002)	Examine whether media coverage induces increased environmental disclosure.	Corporations appear to use disclosure as a legitimating tool to reduce public policy pressures.
O'Donovan (2002)	Examine environmental disclosure in annual reports	Disclosure is used as a strategy in response to legitimacy-threatening environmental issues or events.
Newson and Deegan (2002)	Explore the CSR D of large Australian, Singaporean, and South African multinational companies.	CSR D is made in response to the concerns of relevant public.

Table 2.2 (continued)

Study	Focus of Study	Findings
Campbell (2003)	Investigate the intra- and inter-sectoral effects of environmental disclosures.	Environmental disclosure is used to deflect suspicion with regard to that area of potential criticism.
Rahaman, Lawrence and Roper (2004)	Test environmental disclosure in the Ghanaian public sector.	Institutional pressure is related to environmental disclosure.
Campbell, Moore and Shrives (2006)	Examination of cross-sectional effect in community disclosure in annual report in response to public profile.	Patterns of community disclosure are associated with the information demands of a company's specific stakeholders.
Villiers and Van Staden (2006)	Identify the trends in the environmental disclosure of South African companies.	Companies will decrease specific disclosures when they perceive them to damage their legitimacy.
Cho and Patten (2007)	Investigation of the relation between environmental performance and environmental disclosure.	Companies do appear to use financial report environmental disclosures as a legitimizing tool.
Van Staden and Hooks (2007)	Examination of the relationship between environmental responsiveness and the quality of environmental disclosures.	The responsive firms may be taking a proactive approach to organisational legitimacy.
Islam and Deegan (2008)	Explain the social and environmental reporting of a major garment organisation in Bangladesh.	Social and environmental issues are disclosed in response to pressures from powerful stakeholders.
Archel et al. (2009)	Test the links between the legitimizing strategies of firms and the characteristics of the political environment.	Firms use social environmental disclosure to legitimize a new production process through the manipulation of social perceptions.
Bebbington, Higgins and Frame (2009)	Investigate the CSR of New Zealand companies.	Firms that initiate CSR do so for legitimacy and accountability reasons.
Tilling and Tilt (2010)	Examine the voluntary social and environmental disclosures made in the annual reports of Rothmans.	Firms engage in legitimising strategies, including increased disclosure, when faced with a threat.
Villiers and Van Staden (2010)	Survey individual shareholders in the US, UK, and Australia regarding environmental disclosure.	Companies disclose specific environmental information in order to reduce asymmetry of information.
Coetzee and Van Staden (2011)	Examine the safety disclosure of South African mining companies.	Firms react to perceived legitimacy threats through increased safety disclosure.
Cowan and Deegan (2011)	Examine the impact of a national emissions reporting schema on voluntary emissions disclosure.	Environmental regulation may act as an impetus for changes in the environmental disclosure practices.

2.4 Legitimacy Theory

As noted in previous sections, legitimacy theory is widely used to explain corporate social responsibility disclosure (CSRD) in annual reports and in sustainability reports as a vital tool for corporation to maintain their legitimacy. Many researchers have discussed CSRD practices within the theoretical framework of legitimacy theory⁶. Legitimacy theory offers the researcher and the wider public a way to critically unpack corporate disclosure (Tilling and Tilt 2010). The predominance of legitimacy theory in CSRD research has contributed to a better understanding of the motives and the incentives that lead firms' managers to engage in corporate social responsibility activities (Archel et al. 2009).

According to Gray, Owen and Adams (1996), legitimacy theory and stakeholder theory are both derived from the more general theory known as political economy theory. Gray, Owen and Adams (1996) define political economy theory as the social, political and economic framework within which human life takes place. According to Guthrie and Parker (1990, 166):

The political economy perspective perceives accounting reports as social, political, and economic documents. They serve as a tool for constructing, sustaining, and legitimising economic and political arrangements, institutions, and ideological themes which contribute to the corporation's private interests. Disclosures have the capacity to transmit social, political, and economic meanings for pluralistic set of reports recipients.

Deegan (2002) argues that legitimacy theory, like a number of other theories, such as political economy theory and stakeholder theory, is considered to be a systems-oriented theory. A systems-oriented theory assumes that an entity is influenced by society and, in turn, that entity also

⁶ See Table 2.2. Other relevant studies are Ahmad and Sulaiman (2004), Branco and Rodrigues (2006, 2008, 2008a), Kent and Monem (2008), Joshi and Gao (2009), and Cowan and Deegan (2011).

has an influence upon society. A systems-oriented view of the organisation and society permits us to focus on the role of information and disclosure in the relationship between organisations, the state, individuals, and groups (Gray, Owen and Adams 1996, 45).

Suchman (1995) as cited in Deegan (2007, 129), states:

Systems-oriented theories have reconceptualised organisational boundaries as porous and problematic, and institutional theories have stressed that many dynamics in the organisational environment stem not from technological or material imperatives, but rather, from cultural norms, symbols, beliefs and rituals. Corporate disclosure policies are considered to represent one important means by which management can influence external perceptions about their organisation. At the core of this intellectual transformation lies the concept of organisational legitimacy.

Central to legitimacy theory is the theoretical construct known as the social contract. Legitimacy theory relies on the notion that the legitimacy of a business entity to operate in society depends on an implicit social contract between the business entity and society (Guthrie and Parker 1989). An organisation's survival will be threatened if society perceives that the organisation has breached its social contract (Deegan 2007).

Legitimacy is a relative concept; it is relative to the social system in which the entity operates (Deegan 2007). Legitimacy has been defined by Lindblom (1994) and Suchman (1995) as:

A condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy (Lindblom 1994, 2).

A generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman 1995, 574).

Organisations can maintain their operations only to the extent that they have the support of the community (Deegan 2006). Lindblom (1994) points out that there are four strategies which organisations can adopt to obtain or maintain legitimacy:

- 1) To educate and inform its “relevant publics”—about (actual) changes in the organisation’s performance and activities;
- 2) To change the perceptions of the “relevant publics” - but not change its actual behaviour;
- 3) To manipulate perception by deflecting attention from the issue of concern to other related issues, through an appeal to, for example, emotive symbols; and/or
- 4) To change external expectations of its performance.

Legitimacy theory asserts that organisations continually seek to ensure that they are perceived as operating within the bounds and norms of the societies in which they operate; that is, they attempt to ensure that their activities are perceived by outside parties as being “legitimate” (Islam and Deegan 2008, 853). O’Donovan (2002) argues that the greater the likelihood of adverse shifts in the social perceptions of how an organisation is acting, the greater the desirability on the part of the organisation to attempt to manage these shifts in social perception. In order to retain legitimacy, an organisation is induced into being responsive to changing expectations (O’Donovan 2002; Islam and Deegan 2008). Further, if the activities of organisations are changed, these often are publicised by disclosure (Cormier and Gordon 2001).

There are two major branches of legitimacy theory (Suchman 1995; Joshi and Gao 2009; Tilling and Tilt 2010): institutional legitimacy theory and strategic or instrumental legitimacy theory. Institutional legitimacy theory addresses how organisational structures as a whole (business for example, or the government) have gained acceptance by society at large, whereas strategic or instrumental legitimacy theory describes a process

by which an organisation seeks approval (or avoidance of sanction) from particular groups in society.

According to Lindblom (1994) corporate social responsibility disclosure strategies can be employed that correspond to each of these theories (Gray, Kouhy and Lavers 1995; Deegan 2002). Gray, Kouhy and Lavers (1995) and Mangos and Lewis (1995) argue that corporate social responsibility disclosure is a form of corporate responsiveness by the managers of a firm to pressures which they perceive and that, as a result, the managers then attempt to influence the social environment. Legitimisation strategies, if employed, may vary between countries and general comments about how managers react to particular events need to consider the specific national, historical and cultural context in which managerial and organisations operate (Deegan 2002).

In summary, legitimacy theory posits that companies making corporate social responsibility disclosures are seeking to close legitimacy gaps (Lindblom 1994; Gray, Kouhy and Lavers 1995). Legitimacy theory suggests that higher levels of corporate social responsibility disclosure indicate a need perceived to maintain and/or restore a perceived legitimacy gap. This thesis employs legitimacy theory for two reasons. First, the review of theoretical literature indicates that legitimacy theory has been utilised by numerous researchers to explain the extent and determinants of corporate social responsibility disclosure (see Table 2.1 and 2.2). Second, there has been little agreement about the evidence for or against various empirical instruments for testing legitimacy theory as an explanation of the variability in corporate social responsibility disclosure. This thesis extends previous studies by testing legitimacy theory in an international setting.

2.5 Hypotheses

2.5.1 Firm Size and CSRD

In previous studies, company size has consistently been found to be significantly and positively associated with corporate social responsibility disclosure⁷ (Gray, Kouhy and Lavers 1995; Deegan and Gordon 1996; Gray et al. 2001). Evidence supports the argument that size is an antecedent of legitimacy⁸. Legitimacy theory argues that firm size will affect the firm's visibility to the general public and tends to create increased public scrutiny (Cormier, Magnan and Van Velthoven 2005; Aerts and Cormier 2009). Larger firms are more politically and socially visible, thus they are expected to engage more heavily in legitimating behaviour (Dowling and Pfeffer 1975)

Patten (1991) states that size is often used as a proxy of public pressure. Spicer (1978) finds that companies with better pollution control records tend to be bigger than companies with poorer pollution control records. Firms with higher visibility will tend to disclose more in-depth CSR information in an attempt to respond to the demands of social activists (Belkaoui and Karpik 1989; Adams, Hill and Roberts 1998) and to alleviate potential future regulation risks in the future (Rankin, Windsor and Wahyuni 2011). Larger firms will provide more CSRD as they are more visible and therefore more accountable with respect to CSR information (Cormier and Gordon 2001). They are also likely to have more resources for environmental efforts (Liu and Anbumozhi 2009); therefore, they are able to influence the investor's risk perceptions. Branco and Rodrigues (2008) argue that larger companies are susceptible to more scrutiny from

⁷See Table 2.2.

⁸For examples, see Spicer (1978), Trotman and Bradley (1981), Cowen, Ferreri and Parker (1987), Belkoui and Karpik (1989), Patten (1991), Deegan and Gordon (1996), Hackston and Milne (1996), Adams, Hill and Roberts (1998), Neu, Warsame and Pedwell (1998), Williams (1999); Cormier and Magnan (2003), Nurhayati, Brown and Tower (2006), Ho and Taylor (2007), Ghazali (2007), Branco and Rodrigues (2008), Reverte (2009), Li et al. (2011). All these studies find that the size of the firm is a determinant of CSRD.

stakeholder groups, since they are highly visible to external groups and more vulnerable to adverse reactions among them; by communicating corporate social responsibility disclosure, they can improve their reputations.

Larger firms tend to face greater pressures with respect to policy issues. Companies that have more comprehensive policies regarding their CSR activities may use corporate social responsibility disclosure to respond to public pressures (Deegan and Gordon 1996). Larger companies undertake more activities, have a greater impact on society and have more stakeholders who might be concerned with the CSR activities undertaken by them (Cowen, Ferreri and Parker 1987; Hackston and Milne 1996).

Brammer and Pavelin (2008) argue that high quality disclosures are primarily associated with larger firms, as the interactions of larger firms with society tend to be more numerous and hold greater economic significance. Such larger organisations also tend to be more visible to relevant publics. As a result, they attract relatively greater political and regulatory pressures from external interests. Reverte (2009) contends that the public pressure perspective of legitimacy theory is concerned with public and, consequently, government intrusions into the activities of organisations that are deemed to violate their social contract.

Morhardt (2010) finds a positive association between size (measured by total revenue) and level of sustainability index. Small companies may not perceive any competitive advantage in reporting corporate social responsibility issues, whereas large companies are more likely to demonstrate CSR activities, because doing so could confer many tangible benefits on them. On the basis of the vast majority of past studies'

findings, it is expected that company size has a positive impact on corporate social responsibility disclosure. It is thus hypothesized that:

H1: There is a positive relationship between firm size and the extent of CSRD in sustainability reports.

2.5.2 Industry Type and CSRD

Past studies of corporate social responsibility disclosure have also noted that the type of industry influences the extent of disclosure (see for example Cowen, Ferreri and Parker 1987; Zeghal and Ahmed 1990; Patten 1991; Ness and Mirza 1991; Roberts 1992; Hackston and Milne 1996; Deegan and Gordon 1996; Adams, Hill and Roberts 1998; Williams 1999; Nurhayati, Brown and Tower 2006; Reverte 2009). For example, Eljido-Ten's (2007) findings show that an industry's sensitivity, characterised by increases in governmental sanctions as well as management's concern for the environment, are significant factors influencing the decision to incorporate superior environmental activities in corporate strategic plans. According to legitimacy theory, the type of industry is a proxy of public visibility and public pressures.

Nurhayati, Brown and Tower (2006) argue that greater government scrutiny in the form of more regulations, and higher levels of public interest, place more pressures on companies to better fulfil societal and environmental expectations. The degree of influence of industry type on corporate social responsibility disclosure practices depends on how critical the effects of an organisation's economic activities are on society (Haniffa and Cooke 2005).

Under the tenets of legitimacy theory, the nature of industry type potentially affects corporate social responsibility disclosure practice. Social, political, and economic pressures drive companies to disclose more in order to minimise pressure and criticism from society (Patten

1991; Nurhayati, Brown and Tower 2006). Williams's findings (1999) suggest that industry type can explain variations in the quantity of CSRD practices among companies operating in seven Asia-Pacific countries.

Roberts (1992) and Hackston and Milne (1996) classify industry type as a dichotomous classification into high-profile and low-profile industry. Roberts (1992) defines high-profile industries as those with consumer visibility, a high level of political risk and/or concentrated and intense competition. For instance, companies whose economic activities modify the environment (i.e. resource companies) are more closely monitored for environmental performance than companies in other industries. Hackston and Milne (1996) provide evidence that companies in high-profile industries disclose significantly more CSR information than those in low-profile industries.

Overall, the more sensitive industries are considered to be those that have a greater likelihood of being criticized in corporate social responsibility matters, because their activities are perceived as being of higher risk (Reverte 2009). Based on these arguments the following hypothesis is posited :

H2: Firms in high-profile industries will provide a higher extent of CSRD in sustainability reports than firms in low-profile industries.

2.5.3 The Presence of Voluntary Assurance Statements and CSRD

As discussed in Section 2.1, the key drivers for companies to disclose CSR information are improving their image, building trust, and minimising risks (Adams and Zutshi 2004). Companies that achieve these things have good relations with stakeholders and conform better to stakeholder norms and expectations (Branco and Rodrigues 2008a). More stakeholders are now demanding that sustainability reports more truthfully and fairly

represent what companies have achieved and what they hope to achieve in the future (Gray 2000). To enhance the quality of sustainability reports, stakeholders are also demanding independent assurance (Moroney, Windsor and Aw 2011). Unsurprisingly, the KPMG (2008) survey shows that 56 percent of the G250 companies that issued a report included some type of assurance statement.

A growing number of companies have realised the benefits of increased transparency concerning their sustainability performance (Park and Brorson 2005). Past studies find that the primary motivations of companies for assurance engagements are to improve credibility and make their corporate social responsibility information more transparent (Deegan, Cooper and Shelly 2006; KPMG 2008; Simnett, Vanstraelen and Chua 2009; Perego 2009; Kolk and Perego 2010). Deegan, Cooper and Shelly (2006) note that the practice assurance statement in sustainability reports serves as a communication mechanism and may enhance the clarity and reliability of the statements. Companies use assurance services to increase stakeholder or user confidence in the quality of the sustainability information provided and/or to increase stakeholder trust in the level of organisational commitment to sustainability (Simnett, Vanstraelen and Chua 2009).

Moroney, Windsor and Aw (2011) investigate whether assurance leads to enhanced quality of company environmental disclosure. Using a disclosure index, they find that the quality of environmental disclosures is higher for assured companies than for unassured companies. However, no difference is found in the quality of environmental disclosures for companies that engaged an accountant as their assurer compared to those that engaged a consultant as their assurer reveals a difference in the type of disclosure of each of companies.

Despite increased demand for corporate social responsibility disclosure, few studies have examined whether assurance influences the level of CSRD (Moroney, Windsor and Aw 2011). Kolk and Perego (2010) argue that the demand for assurance services is significantly influenced by the level of awareness about sustainability. They hypothesize that corporations domiciled in countries with higher pressure toward corporate social responsibility disclosure due to public policy and institutional factors would be more likely to have their reports externally verified by an assurance provider. They find that companies with greater awareness of CSRD engage more in assurance services in response to a higher demand for transparency and accountability. This stronger need for legitimacy leads to the third hypothesis:

H3: There is a positive relationship between the presence of voluntary assurance statement and the extent of CSRD in sustainability reports.

2.5.4 Jurisdictional Business Systems and CSRD

A jurisdictional trait is defined as a particular characteristic of the power or influence that a country or group of similar countries possess to carry out legal decisions, enforce laws and/or affect change that influences a firm's communication. Institutional factors have been used as an explanatory factor in CSRD studies. There are several institutional factors that impact disclosure at the national level, such as the type of corporate governance systems (Van der Laan Smith, Adhikari and Tondkar 2005), the type of business systems (Buhr and Freedman 2001; Chapple and Moon 2005), and the type of legal system and its level of enforcement (Williams 1999; Holland and Foo 2003). These studies indicate that corporate social responsibility information communicated by companies would be different in different jurisdictions as the social, environmental, and cultural factors influencing companies vary. As argued by Williams (1999) culture and political and civil systems might significantly influence CSRD practices.

There is also evidence that suggests that country of origin significantly influences corporate social responsibility disclosure (Adams, Hill and Roberts 1998).

Van der Laan Smith, Adhikari and Tondkar (2005) investigate the differences in corporate social responsibility disclosure between countries with difference in shareholder- and stakeholder-orientation. They argue that the level of CSRD is related to the country of origin of the corporations and specifically to the orientation of the country. A stakeholder-oriented or communitarian country is characterised as one that has widespread stakeholders who possess a legitimate interest in and have influence over firms' activities. A shareholder-oriented is one in which companies are seen as instruments to create shareholder value (Simnett, Vanstraelen and Chua 2009). Van der Laan Smith, Adhikari and Tondkar (2005) contend that firms from countries with a stronger emphasis on social issues, such as those in the Scandinavian region, where more emphasis is placed on multiple stakeholders, will have a higher level and quality of corporate social responsibility disclosure than firms from countries with a lesser emphasis on social issues and a greater number of shareholders—for instance US companies.

Buhr and Freedman (2001) investigate the role of cultural and institutional factors in motivating the voluntary environmental disclosure of Canadian and US companies. They find that the disclosure of Canadian companies increased by more than that of US company. Their result suggests that Canadian culture and institutional infrastructure is more conducive to environmental disclosure than that of the US. Baughn, Bodie and McIntosh (2007) investigate corporate social responsibility practices in 104 countries. They conclude that the level of economic development, absence of government corruption, and economic freedom have an impact on the demand for CSR by key stakeholders.

Maignan and Ralston (2002) note that firms in different countries vary in the extent to which they reported CSR information, as well as in their managerial practices. For example, US and UK firms are found to be more likely to communicate corporate philanthropic issues, whereas firms from Holland and France emphasised their commitment to environmental matters. European countries in general have had a greater tradition of reporting CSR concerns (Fekrat, Inclan and Petroni 1996). For instance, Germany and Austria have often been cited for their exemplary environmental disclosure. Japanese companies are more likely to focus their corporate social responsibility disclosure on environmental and policy matters rather than social issues (Baughn, Bodie and McIntosh 2007).

With regard to corporate social responsibility disclosure in emerging countries, Chapple and Moon (2005) find that there is a greater emphasis on community involvement in Thailand, Malaysia, and India, while employee relations received much less emphasis in these countries. Williams (1999) investigates variations in the quantity of CSRD in the seven Asian countries. He finds that the level of disclosure in each of the seven nations differ significantly across national boundaries. His results show that organisations in Singapore, Thailand and the Philippines have higher amounts of disclosure than their counterparts in Hong Kong, Indonesia and Malaysia. Australian-based firms appear to have levels of disclosure between those of these two groups.

Millar et al. (2005) claim that the Anglo-American business system is characterised by the expectation of a high degree of information disclosure, while communitarian and emerging business systems are more likely to disclose limited amounts of information and to lack transparency. This is consistent with lower legitimacy expectations. Peter, Miller and Kusyk (2011) add that the emerging markets tend to display weaker measures of CSR. However, even current studies show that the extent of

corporate social responsibility disclosure in emerging countries is still fairly low⁹. Some studies have noted that in these countries the levels of social disclosures in areas such as labour issues and community involvement are marginally high¹⁰. However, Islam and Deegan (2010) provide evidence that in developing countries the CSR communication of labour information, has frequently been at the centre of global criticisms. Their study find that Bangladeshi companies seek to mitigate the media pressures they face by providing positive CSRD such labour information. Based on these arguments about jurisdictional-based diversity, it is hypothesized that:

H4: There is a relationship between jurisdictional business systems and the extent of CSRD in sustainability reports.

2.5.5 The Presence of a CSR Committee and CSRD

Recently, corporate social responsibility disclosure practices have developed rapidly and, as a consequence, studies are paying more attention to companies' internal processes of reporting (Adams 2002; Kent and Monem 2008; Rankin, Windsor and Wahyuni 2011). Adams (2002) argues that a company reporting process and decision-making are influenced by the degree of formality versus informality, the departments involved and the extent of engagement of stakeholders. Specific internal systems are vital to enable companies to credibly monitor CSR activities (Rankin, Windsor and Wahyuni 2011). For example, the presence of a CSR committee (composed of key business personnel) facilitates the

⁹For example CSRD in Malaysian companies has been found to be 17.1 percent (Haniffa and Cooke 2005), 25.2 percent (Ghazali 2007) and 13.9 percent (Said, Zainuddin and Haron 2009); in South African companies 27.1 percent (Coetzee and Van Staden 2011); Chinese companies 28.8 percent (Liu and Anbumozhi 2009); Qatari companies 33.0 percent (Naser et al. 2006); and Indonesian companies is 36.2 percent (Gunawan, Djajadikerta and Smith 2009).

¹⁰ Gunawan, Djajadikerta and Smith (2009); Pratten and Mashat (2009); and Mahadeo, Hanuman and Soobaroyen (2011) show that the level of labour and community involvement disclosure range widely between 40–95 percent.

embedding and integration of corporate social responsibility into business practices. Such a committee can hold stakeholder events to better ensure the CSR strategy is in line with stakeholder expectations (Spitzek 2009). A firm more actively engaging with stakeholders can undertake various actions in order to better manage corporate social responsibility issues (Mallin and Michelon 2011).

Prior studies suggest that the presence of a CSR committee affects the level of corporate social responsibility disclosure. Ullman (1985) argue that the presence of such a committee is an effective monitoring device for improving the range of disclosures provided to stakeholders. Cowen, Ferreri and Parker (1987) test the relationship between company characteristics and the types of CSR. They argue that the existence of such a committee could be associated with a greater propensity to communicate CSR issues. Their finding provides evidence that there is a significant association between human resources disclosures and the presence of CSR committee.

Rankin, Windsor and Wahyuni (2011) examine the relationship between the presence of a CSR committee and the extent of voluntary corporate greenhouse gas emissions disclosure. They argue that the presence of a CSR committee motivates a firm to implement policies and practices to measure and report on greenhouse gas emissions level. Moreover, they hypothesize that firms that have voluntarily introduced a CSR committee (as a part of the board) are more likely to voluntarily disclose credible greenhouse gas emissions information in their reports. However, their study failed to statistically show the relationship between the presence of a CSR committee and the extent of corporate greenhouse gas emissions disclosure.

Kent and Monem (2008) study the factors that drives the adoption of triple bottom line (TBL) reporting. They argue that a CSR committee encourages companies to demonstrate greater accountability and transparency in corporate social responsibility disclosure, and that it constitutes a formal recognition that CSR impacts the activities of the company. Their result shows that a CSR committee is positively related to the adoption of TBL reporting.

From the point of view of legitimacy theory, the presence of such a committee within the board may strengthen the public perception of corporate legitimacy. As argued by Mallin and Michelon (2011), when the board appoints a CSR committee to manage the CSR impacts on business activities, it is more likely that company will have greater legitimacy in the community in which it operates. Thus, the fifth hypothesis:

H5: There is a positive relationship between the presence of a CSR committee and the extent of CSRD in sustainability reports.

In summary, five variables are hypothesized within tenets of the legitimacy theory. These variables are firm size, industry type, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee. These variables will be examined to identify the determinants of the extent of corporate social responsibility disclosure (CSRD) in sustainability reports. Table 2.3 summaries the five hypotheses.

Table 2.3 Summary of Hypotheses

Variable	Hypothesis	Description
<i>Company Characteristics:</i>		
Firm Size	H1	There is a positive relationship between firm size and the extent of CSRD in sustainability reports.
Industry Type	H2	Firms in high-profile industries will provide a higher extent of CSRD in sustainability reports than firms in low-profile industries.
<i>The Presence of a Voluntary Assurance Statement</i>	H3	There is a positive relationship between the presence of a voluntary assurance statement and the extent of CSRD in sustainability reports.
<i>Institutional Factor:</i>		
Jurisdictional Business Systems	H4	There is a relationship between jurisdictional business systems and the extent of CSRD in sustainability reports.
<i>Internal Factor:</i>		
The Presence of a CSR Committee	H5	There is a positive relationship between the presence of a CSR committee and the extent of CSRD in sustainability reports.

2.6 Summary

This chapter provides a review of the literature that is relevant to this thesis. First, past studies of the explanations as to why companies engage in corporate social responsibility disclosure and, more particularly legitimacy theory are reviewed and posited as the framework for this thesis. Next, the chapter reviews the determinants of the extent of CSRD from various perspectives in both single country and cross-country settings. The theoretical frameworks used in past studies are discussed, and these forms the theoretical foundation for this thesis. They are the basis upon in which the five hypotheses are developed.

Prior studies suggest that the size of firms, the type of industry, the presence of a voluntary assurance statement, jurisdictional business systems and the presence of a CSR committee are significantly and positively associated with corporate social responsibility disclosure. Larger firms and more sensitive industries are more politically visible and have higher public pressures, thus they are expected to communicate more

corporate social responsibility disclosure to legitimate their operations. The presence of a voluntary assurance statement and a corporate social responsibility committee enhance stakeholder trust into the quality of sustainability information. Therefore, these may strengthen the public's perception of corporate legitimacy. Firms from countries with more emphasis on multiple stakeholders will provide more corporate social responsibility disclosure to demonstrate greater accountability, in order to have greater legitimacy in the community in which they operate. In summary, the theoretical tenets suggest that companies provide corporate social responsibility disclosure in response to stakeholders, in order to legitimate their activities.

The following chapter presents the research approach adopted. It then explores the research paradigm and methods. The research methods include data collection, sample selection, measurement of variables, and statistical analysis in order to examine the relationship between dependent, independent, and control variables.

CHAPTER THREE

RESEARCH APPROACH

3.0 Introduction

This chapter presents the research approach adopted in this thesis. Section 3.1 describes the thesis's research paradigm. Sections 3.2 and 3.3 then review the specific research methods (data collection, sample selection, measurement of variables) and statistical analyses used to explore the relationship between corporate social responsibility disclosure and the predictor variables. Finally, a summary of this chapter is provided in Section 3.4.

3.1 Research Paradigm

The purpose of considering the research paradigm is to understand the paradigm that underpins the choices and decisions to be made in determining a research position (Carson et al. 2001). Understanding the research paradigm is crucial for making sense of the social world. Carson et al. (2001, 2) argue that a research position will have implications for what, how and why research is carried out. Consideration of the research paradigm provides a deeper and wider perspective, so that research projects can have a clearer purpose within a broader context.

A paradigm is defined as a set of basic beliefs (or metaphysics) that deals with ultimates or first principles. It represents a worldview that defines, for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to the world and its part (Guba and Lincoln 1994, 107).

Guba and Lincoln (1994) argue that there are three sets of basic beliefs, namely ontological, epistemological, and methodological. The ontological has regard to nature and reality (Guba and Lincoln 1994; Carson et al. 2001). It determines the forms of reality perceived by the observer (Guba and Lincoln 1994). Positivists believe that there is a single reality, while

interpretivists believe that there are multiple constructed realities (Tashakkori and Teddlie 1998). The epistemological addresses the nature of the knowledge to be studied (what can be studied) and the relationship between the researcher and that which is to be known (Guba and Lincoln 1994). Positivists believe that the knower and the known are independent, whereas interpretivists believe that the knower and the known are inseparable (Tashakkori and Teddlie 1998).

The methodological question determines the process for studying an areas or how the researcher goes about the research (Guba and Lincoln 1994). Positivist researchers consult prior theories in the literature in order to arrive at hypotheses or research questions in the early stages of the research, and are unlikely to add to that prior theory during later stages (Tashakkori and Teddlie 1998). In contrast, theory can be used at various stages in the research when an interpretivist approach is taken (Tashakkori and Teddlie 1998). Positivist researchers believe that the researcher should remain distanced from the material being studied. Whereas, interpretivist researchers require the researcher to get involved with the material being researched (Carson et al. 2001).

Within the ontological, corporate social responsibility disclosure is seen as reality, the perceptions of corporate managers are of primary importance as they provide evidence of the motivations behind CSRD practices. From an epistemological point of view, this thesis collects knowledge about CSRD practices from corporate reports (sustainability reports, annual reports, and corporate website). As discussed in Chapter 1, the objectives of this thesis are to provide explanations of why companies provide CSRD. Within the methodological, this thesis uses quantitative method approach. Most CSRD studies have used a quantitative disclosure index as a part of their quantitative method. Finally, this thesis employs statistical analysis to test the hypotheses. Table 3.1 provides broad definitions of the

positivist and interpretivist ontology and epistemologies, and the characteristics of the relevant methodologies for both these differing paradigms.

Table 3.1 Two Paradigms of Social Science Research

	Positivism¹¹	Interpretivism¹²
<u>Ontology</u>		
Nature of the world and reality	Have direct access to real world and single external reality	No direct access to real world and no single external reality
<u>Epistemology</u>		
Relationship between reality and research	Possible to obtain hard, secure objective knowledge; research focuses on generalization and abstraction; thought governed by hypotheses and theories	Understood through perceived knowledge; research focuses on the specific and concrete; seeking to understand specific context
<u>Methodology</u>		
Focus of research	Concentrates on description and explanation	Concentrates on understanding and interpretation
Role of researcher	Detached, external observer; aims to discover external reality rather than creating the object of the study; strives to use a rational, consistent, verbal, logical approach; seeks to maintain clear distinction between facts and value judgements	Researchers want to experience what they are studying; partially create what is studied and the meaning of the phenomena; use of pre-understanding is important; distinction between facts and judgements less clear
Techniques used by researcher	Statistical and mathematical methods predominant	Primarily non-quantitative

Source: Adapted from Carson et al. (2001, 8)

¹¹Positivism also is often referred to as empiricism, foundationalism, instrumentalism, logicism, and objectivism (Sousa 2010).

¹²Interpretivism is also frequently called as idealism, subjectivism, relativism, and constructivism (Sousa 2010).

This thesis employs a positivist approach to understanding corporate social responsibility disclosure. The main reason adopting the positivist approach is that the constructs and factors identified in the proposed research model can be objectively measured. This approach is widely used to explain why companies engage in CSRD using corporate media such as annual reports, sustainability reports or websites (Roberts 1992; Islam and Deegan 2008).

A positivist approach seeks to observe real world factors (for example what is being done) and correlate them (Spicer 1978). As argued by Sousa (2010), positivism is built on several assumptions: an equivalence of explanation and prediction, large-scale deployment of induction and deduction, the universality of closed systems and the conception of causality as cause–effect relations. Moreover, he notes that the main objective of positivist science is a prediction. Therefore, a positivist approach can be used to explain the incidence of and motivation for CSRD in companies' annual or stand-alone reports (Ness and Mirza 1991).

The quantitative approach focuses on cause and effect relationships and involves examining the potential relationship between the dependent and independent variables. This thesis takes such a quantitative approach to examine the relationship between CSRD and key predictors such as firm size, industry type, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee. Such an approach is used because it is focused on explaining associations between two or more variables and addressing specific questions about a clearly defined topic. By using a quantitative approach in such a disclosure study, the findings may be more objective and informative for stakeholders and other parties (Al-Tuwaijiri, Christensen and Hughes 2004).

3.2 Research Methods

The stated purpose of this thesis is to determine the extent of corporate social responsibility disclosure (CRSD) across jurisdictions and to analyse company characteristics, the presence of voluntary assurance statements, institutional and internal factors influencing the extent of CRSD. Legitimacy theory is the theoretical framework within which these purposes will be pursued. The research approach adopted to test these purposes encompasses data collection, sample selection, measurement variables, and statistical analysis.

3.2.1 Data Collection

The data collection focuses on the 2009 fiscal year. The diverse data set collected for this thesis is sourced from 460 public companies from 44 separate countries. 2009 is the latest reporting date at the time that data is being collected for this study. The types of data acquired include: (1) data on corporate social responsibility disclosure (CRSD); (2) data on the presence of a voluntary assurance statement; (3) data on firm characteristics (firm size, industry type, profitability (ROA), and leverage); (4) data on jurisdictional business systems; and (5) data on the presence of a CSR committee.

In this thesis the data for CRSD and the presence of a voluntary assurance statement are derived from stand-alone sustainability reports. Most of these sustainability reports are obtained from the GRI website¹³ and CorporateRegister website¹⁴. Sustainability reports not available from the GRI and CorporateRegister websites are obtained from the individual company's websites. Data sources for the presence of a CSR committee, for firm characteristics: size, industry, profitability and leverage

¹³ www.globalreporting.org

¹⁴ www.corporateregister.com

are obtained from sustainability reports, annual reports, and Factiva databases.

3.2.2 Sample Selection

The initial sample included 1421 companies from the 59 countries listed on the GRI website for the 2009 fiscal year. The companies chosen as the sample are all public companies. Companies in each country are chosen based on the representativeness of their characteristics of each region/country, and the manageability of data gathering. The sample firms have to meet the following criteria:

1. They have to have 2009 fiscal year.
2. They have to have an English versions of stand-alone sustainability reports.
3. They have to be public and parent companies in their country.
4. They have complete data sets for the dependent and independent variables, which are available in sustainability and annual reports, company's websites or the Factiva databases.

The proportional stratified random sampling method is used to select the thesis sample. By using this method, the relative quantity of each stratum is controlled, rather than having it determined by random processes. This approach better guarantees the proportion of different strata within a sample. It also produces a final sample that has a more equal representation of each key sub-group from the population than simple random methods would produce (Neuman 2006).

Using the GRI's report lists (retrieved on 24 November 2010); there are 1418 sustainability reports for the year 2009 listed¹⁵ on the GRI website.

¹⁵The total population of companies can never be totally known as the GRI lists only reported companies which have voluntarily submitted their sustainability report to be reviewed by the GRI process. In essence, the population is the list as it is the subset that willing offered their reports for higher level scrutiny.

195 reports are excluded as they are annual reports and/or integrative reports (combined annual and sustainability reports). The English version of sustainability reports are solely selected, thus another 383 reports are excluded. 272 reports come from non public companies. The available population thus consists of 568 firms. These firms are subject to stratified proportional (by jurisdiction, industry, assurance statement, presence of a CSR committee) random sampling. The final sample of 460 firms represents 81 percent of the available population. Although biased towards English language, the overall sample selection is felt to be large and representative of GRI type global companies. Table 3.2 summarises the sample selection.

Table 3.2 Sample Selection

Total companies listed on GRI's report lists (retrieved on 24 November 2010)	1418
1. Less companies that do not have a stand-alone report (e. g. annual reports or integrative reports only)	(195)
2. Less companies that do not have a sustainability report in an English language version	(383)
3. Less companies that are not a public and parent company	(272)
4. Less incomplete data	(0)
Available population	568
Final Sample	460

The sample represents 81 percent of the available population.

3.2.3 Measurement of Variables

This section explains the measurement of the dependent, independent, and control variables. In this thesis, the extent of corporate social responsibility disclosure (CSR D) is the dependent variable. As discussed in the previous chapter, this thesis uses the definition of CSR D from the GRI (2006). The GRI (2006, 3) defines CSR D as the practice of measuring, disclosing, and being accountable to internal and external

stakeholders for organisational performance towards the goal of sustainable development.

3.2.3.1 Dependent Variable

In order to provide evidence regarding the two research questions and their corresponding hypotheses, sustainability reports of the 460 public companies from 44 countries are examined to assess their corporate social responsibility disclosure using a disclosure index. The empirical literature about voluntary CSRD suggests that there are two main approaches utilised to measure the extent of disclosure (Williams 1997). These are disclosure indices (or disclosure occurrence) and content analysis (or disclosure abundance) (Joseph and Taplin 2011).

The disclosure index has been widely used in CSRD studies (Williams 1997, see Table 3.3); and two definitions of the disclosure index are:

...a quantitative based instrument designed to measure a series of items which, when aggregated, gives a surrogate score indicative of the level of disclosure in the specific context for which the index was derived (Coy, Tower and Dixon 1983, 122).

...the disclosure index counts the number of items in a checklist or disclosure index with at least some disclosure (Joseph and Taplin 2011, 20).

Some past studies argue that the disclosure index approach has two disadvantages. First, it is difficult to avoid a subjective decision concerning when disclosures are separate items. For example, corporate's mission and objective could be a single or two items (Cooke 1991; Joseph and Taplin 2011). Second, particular disclosure items may be irrelevant and inapplicable to particular sample companies (Cooke 1991; Cahaya 2006).

On the other hand, content analysis is defined as a method of codifying text into different groups depending on selected criteria, which are known as the *coding structure (framework)* (Weber 1988 as cited in Bouten et al. 2011). Content analysis counts the volume of disclosure such as the number of pages, lines, sentences, or words (Joseph and Taplin 2011). Several previous content analysis studies have utilised the number of words (Deegan and Gordon 1996), sentences (Hackston and Milne 1996), or pages (Patten 1992; Gray, Kouhy and Lavers 1995) as techniques of content analysis.

However, the use of content analysis as a technique to measure level of disclosure has some limitations (Xiao et al. 2005). First, it is difficult to make comparisons between two annual or stand-alone reports if fonts, page margins, and other component (pictures and graphs) differ. Second, there is little agreement about how non-textual items such as figures and tables are counted (Joseph and Taplin 2011) and how disclosures in these formats should be converted into a number of sentences (Unerman 2000). Finally, one sentence, line or page may contain more than one category of information and the researcher may have difficulty in deciding which category the sentence, line or page belongs to (Xiao et al. 2005).

Consistent with past corporate social responsibility disclosure studies (see for example Williams 1997; Ho and Taylor 2007; Cahaya, Porter and Brown 2008; Christopher and Filipovic 2008; Said, Zainuddin and Haron 2009; Rankin, Windsor and Wahyuni 2011) this thesis employs a disclosure index to measure the extent of CSRD, as this approach enables the researcher to gain better insights into the level and type of CSR information communicated by companies (Cahaya 2006). As argued by Williams (1997), a disclosure index offers a valid and useful method for measuring the extent of CSRD. Moreover, Joseph and Taplin (2011)

argue that a disclosure index is a more predictable measurement of CSRD than content analysis.

Marston and Shrives (1991), in their review of the disclosure index literature, report that a variety of studies have adopted a disclosure index as the primary mechanism for measuring the extent of disclosure. Disclosure indices can be broadly classified into weighted or unweighted indices (Cooke 1991). In a weighted disclosure index, particular disclosure items are given a higher score (when those items are disclosed) than the other disclosure items. The weighting is based on the perceived importance of the items (Cooke 1991). Whereas, in an unweighted index, each disclosure item is deemed equally important and therefore awarded the same score when it is disclosed (Cooke 1991; Meek, Roberts and Gray 1995).

Most prior studies in corporate social responsibility disclosure have used an unweighted index to measure the level of disclosure (see Table 3.3), as this technique is considered far less subjective than a weighted index and more relevant to all companies (Cooke 1991; Meek, Roberts and Gray 1995). The unweighted approach is adopted in this thesis: the CSRD index is calculated as a dichotomous equally weighted (i.e. unweighted) index on a 0-100 percent scale. All items are equally weighted and each of the 79 GRI possible indicators that are disclosed is awarded a score of 1 (and a score of 0 if not disclosed). Items are removed from the equation when they are clearly not applicable. The utilization of a dichotomous equally weighted index is preferred because this study is concerned with the level of disclosure as opposed to the company's perceived importance of disclosed items.

Table 3.3 gives an overview of past studies approaches to measure the extent of corporate social responsibility disclosure.

Table 3.3 Key Studies that Measure CSR

Study	Measurement of CSR	Content analysis	Disclosure index analysis	Number of items
Cowen, Ferreri and Parker (1987)	Content analysis	Number of pages	-	-
Roberts (1992)	Disclosure index analysis	-	Rating	-
Hackston & Milne (1996)	Content analysis	Number of pages and sentences	-	-
Adams, Hill and Roberts (1998)	Content analysis	Number of pages	-	-
Al-Tuwaijiri, Christensen and Hughes (2004)	Content analysis	Number of sentences, pages, words	-	-
Haniffa and Cooke (2005)	Disclosure index analysis and content analysis	Number of words	Equally weighted	43
Naser et al. (2006)	Content analysis	Number of pages	-	-
Ho and Taylor (2007)	Disclosure index analysis	-	Equally weighted	60
Ghazali (2007)	Disclosure index analysis	-	Equally weighted	22
Christopher and Filipovic (2008)	Disclosure index analysis	-	Equally weighted	40
Cahaya, Porter and Brown (2008)	Disclosure index analysis	-	Equally weighted	20
Clarkson et al. (2008)	Disclosure index analysis	-	Different weights	45
Aerts and Cormier (2009)	Disclosure index analysis	-	Different weights	39
Da Silva Monteiro and Aibar-Guzman (2010)	Disclosure index analysis	-	Equally weighted	16
Said, Zainuddin and Haron (2009)	Disclosure index analysis	-	Equally weighted	78
Pratten and Mashat (2009)	Content analysis	Number of pages	-	-
Lynch (2010)	Disclosure index analysis	-	Equally weighted	85
Coetzee and Van Staden (2011)	Disclosure index analysis and content analysis	Number of pages, sentences, and words	Different weights	18
Rankin, Windsor and Wahyuni (2011)	Disclosure index analysis	-	Equally weighted	36

Consistent with Frost et al. (2005), Ho and Taylor (2007), Cahaya, Porter and Brown (2008), and Clarkson et al. (2008), the CRSD score is calculated by adopting the GRI guidelines, version 2006. Using a well-established check list of items to collect data such as the 2006 GRI indicators, enhance the reliability¹⁶ of this disclosure index. GRI (2006) reporting guidelines contain 79 indicators that reflect the spirit of corporate social responsibility and sustainability reporting. These 79 indicators can be categorised into six themes: economic (9 indicators), environmental (30 indicators), labour practices (14 indicators), human rights (9 indicators), society (8 indicators) and product responsibility (9 indicators). Following Haniffa and Cooke (2005), the formula for the CRSD index is as follows:

$$CRSD_j = \frac{\sum_{i=1}^{n_j} X_{ij}}{n_j}$$

where:

$CRSD_j$ = corporate social responsibility disclosure for firm j

n_j = number of indicators expected for j th firm, $n_j \leq 79$

$X_{ij} = 1$ if i th item is disclosed, 0 if i th item is not disclosed

$0 \leq I_j \leq 1$

Table 3.4 lists the specific indicators based on the Global Reporting Initiative (GRI) guidelines.

Table 3.4 The 2006 GRI Performance Indicators

ECONOMIC		
Category	GRI code	Indicator ¹⁷
Economic Performance	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.

¹⁶To better ensure the reliability of disclosure index, this thesis uses two independent and experienced coders. Before the coding structure was used, it was tested to better confirm that both coders have applied the same definition.

¹⁷These indicators are further categorised into core and additional components (refer to Appendix A).

	EC2	Financial implications and other risks, and opportunities for the organisation's activities due to climate change.
	EC3	Coverage of the organisation's defined benefit plan obligations.
	EC4	Significant financial assistance received from government.
Market Presence	EC5	Range of ratios of standard entry level of wage compare to local minimum wage at significant locations of operation.
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.
	EC7	Procedures for local hiring and proportion of senior management hired from community at significant locations of operation.
Indirect Economic Impact	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or <i>pro bono</i> engagement.
	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.
ENVIRONMENTAL		
Category	GRI code	Indicator
Materials	EN1	Materials used by weight or volume.
	EN2	Percentage of materials used that they are recycled input materials.
Energy	EN3	Direct energy consumption by primary energy source.
	EN4	Indirect energy consumption by primary source.
	EN5	Energy saved due to conservation and efficiency improvements.
	EN6	Initiatives to provide energy-efficient or renewable energy-based products and services and reduction in energy requirements as a result of these initiatives.
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved.
Water	EN8	Total water withdrawal by source.
	EN9	Water sources significantly affected by withdrawal of water.
	EN10	Percentage and total volume of water recycled and re-used.
Biodiversity	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.
	EN13	Habitats protected or restored.
	EN14	Strategies, current actions and future plans for

		managing impacts on biodiversity.
	EN15	Number of International Union for Conservation of Nature and Natural Resources (IUCN) Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.
Emissions, Effluents and Waste	EN16	Total direct and indirect greenhouse gas emissions by weight.
	EN17	Other relevant indirect greenhouse gas emissions by weight.
	EN18	Initiatives to reduce greenhouse gas emissions and reduction achieved.
	EN19	Emissions of ozone-depleting substances by weight.
	EN20	Nitric Oxide (NO), Sulfur Oxide (SO) and other significant air emission by type and weight.
	EN21	Total water discharge by quality and destination.
	EN22	Total weight of waste by type and disposal method.
	EN23	Total number and volume of significant spills.
	EN24	Weight of transported, imported, exported or treated waste deemed hazardous, under the terms of the Basel Convention Annex I,II,III and IV, and percentage of transported waste shipped internationally.
	EN25	Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharge of water and runoff.
Product and Services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category.
Compliance	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.
Transport	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce.
Overall	EN30	Total environmental protection expenditures and investments by type.
LABOUR PRACTICES		
Category	GRI code	Indicator
Employment	LA1	Total workforce by employment type, employment contract and region.
	LA2	Total number and rate of employee turnover by age group, gender and region.
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.

Labour/ Management Relations	LA4	Percentage of employees covered by collective bargaining agreements.
	LA5	Minimum notice period (s) regarding significant operational changes, including whether it is specified in collective agreements.
Occupational Health and Safety	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region.
	LA8	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.
	LA9	Health and safety topics covered in formal agreements with trade unions.
Training and Education	LA10	Average hours of training per year per employee by employee category.
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.
	LA12	Percentage of employees receiving regular performance and career development reviews.
Diversity and Equal Opportunity	LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.
	LA14	Ratio of basic salary of men to women by employee category.
HUMAN RIGHTS		
Category	GRI code	Indicator
Investment and Procurement Practices	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.
	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.
	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.
Non-discriminant	HR4	Total number of incidents of discrimination and actions taken.
Freedom of Association and	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be

collective bargaining		at significant risk, and actions taken to support these rights.
Child Labour	HR6	Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.
Forced and Compulsory Labour	HR7	Operations identified as having significant risk for incidents of forced or compulsory labour, and measures taken to contribute to the elimination of forced or compulsory labour.
Security Practices	HR8	Percentage of security personal trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations.
Indigenous Rights	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.
SOCIETY		
Category	GRI code	Indicator
Community	SO1	Nature, scope, and effectiveness of any programs and practices that asses and manage the impact of operations on communicaties, including entering, operating, and existing.
Corruption	SO2	Percentage and total number of business units analysed for risks related to corruption.
	SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures.
	SO4	Actions taken in response to incidents of corruption.
Public Policy	SO5	Public policy positions and participation in public policy development and lobbying.
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.
Anti-Competitive Behaviour	SO7	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes.
Compliance	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non compliance with laws and regulations.
PRODUCT RESPONSIBILITY		
Category	GRI code	Indicator
Customer Health and Safety	PR1	Life-cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcome.
Product and	PR3	Type of product and service information required by

Service Labelling		procedures and percentage of significant products and services subject to such information requirements.
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and services information and labelling, by type of outcomes.
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.
Marketing Communications	PR6	Programs for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.
Customer Privacy	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.
Compliance	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.

Source: Adapted from GRI Guidelines Version 3.0 (2006)

3.2.3.2 Independent Variables

This section explains the measurement of the independent variables, including firm size, industry type, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee.

Firm Size

Firm size is commonly used as a proxy for public visibility. The more visible the companies the more CSR activities will be considered and disclosure can then be used as a way to enhance corporate reputation. This is consistent with the tenets of legitimacy theory. Williams (1999), Ho and Taylor (2007), Branco and Rodrigues (2008), and Cahaya, Porter and Brown (2008) conclude that firms size appears to be a significant determinant of corporate social responsibility disclosure (see Chapter 2 for

details). Previous studies measure firm size by various means (see Table 3.5 for details).

Table 3.5 Previous Studies of Firm Size Measurement

Study	Measurement
Roberts (1992)	Revenues
Meek, Roberts and Gray (1995)	Sales turnover
Hackston and Milne (1996)	Market capitalization, sales, total assets
Adams, Hill and Roberts (1998)	Sales turnover
Williams (1999)	Market capitalization
Haniffa and Cooke (2005)	Total assets
Gao, Heravi and Xiao (2005)	Sales turnover
Smith, Yahya and Amiruddin (2007)	Number of employees ¹⁸ , total assets, market capitalization
Branco and Rodrigues (2008)	Number of employees, number of branches, total assets
Reverte (2009)	Market capitalization
Said, Zainuddin and Haron (2009)	Total assets
Villiers and Van Staden (2010)	Total assets
Rankin, Windsor and Wahyuni (2011)	Market capitalization
Moroney, Windsor and Aw (2011)	Total assets
Coetzee and Van Staden (2011)	Total assets

No overarching theoretical reason exists for a particular measure of firm size (Hackston and Milne 1996). Therefore consistent with the majority of past literature, this thesis uses the number of employees as the main proxy of firm size. Total assets is also examined in the additional analysis section. Firm size will be logged to reduce skewness and the impact of outliers (Tabachnick and Fidell 2007).

¹⁸The number of employees is used in this thesis as an alternative measure. This measure has been used by prior studies (e.g. Smith, Yahya and Amiruddin (2007) and Branco and Rodrigues (2008)).

Industry Type

Industry type is measured by a dummy variable in this thesis. A category label of 1 is given if the company is high-profile and 0 otherwise. The sensitivity of an industry could represent the extent of the political costs it incurs. High-profile industries (labelled as category 1) can be expected to demonstrate greater concern for CSRD than low-profile industries. Patten (1991); Hackston and Milne (1996); Adams, Hill and Roberts (1998); and Newson and Deegan (2002) note that industry type has a significant impact on CSRD (see Chapter 2 for details). In this thesis industries are classified as high-profile and low-profile. Table 3.6 lists the high-profile and low-profile classifications of industry type made by past studies.

Table 3.6 Previous Studies of Industry Classification

Study	Industry	High Profile	Low Profile
Roberts (1992)	1. Automobile 2. Airline 3. Oil	1, 2, 3	All else
Meek, Roberts and Gray (1995)	1. Metal, building materials, construction 2. Engineering 3. Consumer goods and services 4. Oil, chemicals and mining	4	1, 2, 3
Hackston and Milne (1996)	1. Automobile, airline, oil, agriculture, liquor, tobacco, media 2. Food, health, personal products, hotel, appliances, household products	1	2
Adams, Hill and Roberts (1998)	1. Oil, chemicals, metals and power. 2. Manufacturing and automobiles. 3. Engineering and construction including construction materials. 4. Services, food and retail.	1, 2	3, 4
Newson and Deegan	1. Raw materials extraction 2. Chemicals	1, 2, 3	4, 5, 6

(2002)	3.Wood, paper & forestry 4.Services 5.Healthcare 6.Computers and electronics		
Haniffa &Cooke (2005)	1.Consumer goods 2.Construction/property 3.Trading/services 4.Plantation/mining 5.Industrial	1, 4, 5	2, 3
Gao, Heravi and Xiao (2005)	1.Property 2.Banking and Finance 3.Utilities	3	1, 2
Reverte (2009)	1.Mining, oil and gas 2.Chemicals 3.Paper and forestry 4.Steel and other metals 5.Electricity, gas distribution, water	1 - 5	others
Moroney, Windsor and Aw (2011)	1. Oil and gas 2. Chemicals 3. Forest and paper products 4. Utilities 5. Metals and mining 6. Industrials	1 - 6	others

Based on the previous studies, four industries—oil and gas, basic materials, utilities, and finance—are categorised in this thesis as high-profile. Six industries; industrials, consumer goods, health care, consumer services, telecommunications, and technology—are classified as low-profile industries. Roberts (1992, 605) defines high-profile industries as those having significant consumer visibility, a high level of political risk or concentrated and intense competition.

Table 3.7 supports this thesis's industry classification. The industry groups it depicts are those used by the Industry Classification Benchmark (ICB). The ICB is a classification taxonomy developed by the Dow Jones, the

Financial Times and the London Stock Exchange (FTSE). The ICB uses a system of 10 industries, partitioned into 20 super sectors, which are further divided into 41 sectors, which then contain 114 subsectors.

Table 3.7 Industry Classification of Sample Companies

The ICB Industry	Industry Classification
Oil and Gas	High Profile
Basic Materials	High Profile
Utilities	High Profile
Financials	High Profile
Industrial	Low Profile
Consumer Goods	Low Profile
Healthcare	Low Profile
Consumer Services	Low Profile
Telecommunications	Low Profile
Technology	Low Profile

Industry classification based on the Industry Classification Benchmark (ICB).

The Presence of a Voluntary Assurance Statement

Numerous studies argue that companies' adoption of a voluntary assurance statement for their sustainability reports would enhance the credibility of these reports (Deegan, Cooper and Shelly 2006; Simnett, Vanstraelen and Chua 2009; Kolk and Perego 2010). Past studies measure the presence of a voluntary assurance statement as a dichotomous variable. That is, the variable takes the value of 0 in the case of the sustainability report not being assured, and 1 where the report is assured (see for example Simnett, Vanstraelen and Chua 2009; Kolk and Perego 2010).

Consistent with these previous studies, in this thesis, the presence of a voluntary assurance statement is measured by a dummy variable. The variable is 1 if a company has an assurance statement in their

sustainability reports and 0 if a company does not have an assurance statement in their sustainability reports.

Table 3.8 highlights past studies that have measured the presence of a voluntary assurance statement variable.

Table 3.8 Previous Studies Measures for the Presence of Voluntary Assurance Statements

Study	Measurement
Simnett, Vanstraelen and Chua (2009)	Dummy variable, is 0 if sustainability report is not assured, and 1 where the report is assured.
Kolk and Perego (2010)	Dummy variable equals 1 if an environmental, social and environmental or sustainability annual report is accompanied by an assurance statement, and 0 otherwise.
Moroney, Windsor and Aw (2011)	Dummy variable coded 1 if company has environmental assurance and 0 otherwise

Jurisdictional Business Systems

Prior studies have indicated that the CSRD information communicated by companies is different in different jurisdictions, as the social, environmental, and cultural factors influencing companies vary (Williams 1999). In previous studies, jurisdiction, legal origin and/or country orientation have been most often measured as either developed versus developing country, stakeholder versus shareholder oriented, or common versus code law. Many of these studies have focused on comparing shareholders versus stakeholder orientation. However, international business systems consist of more than conventional shareholder and stakeholder, features of emerging market systems must also be considered, for example, the fact that many companies are dominated by family owners and normally have relatively weak investor protection (Millar et al. 2005). Table 3.9 exhibits past studies that have classified the jurisdictional variable. This variable is measured by a categorical variable

that classifies firms in each home country into three jurisdictional groups: Anglo-American; communitarian; and emerging market (Eldomiaty, Choi and Cheng 2005).

Table 3.9 Previous Studies of Jurisdictional Classification

Study	Variable	Classification
Williams (1999)	Legal systems; level of economic development	Code, Common law; developed, undeveloped
Hope (2003)	Legal origin	Code, Common law
Van der Laan Smith, Adhikari and Tondkar (2005)	Country orientation	Stakeholder, shareholder
Simnett, Vanstraelen and Chua (2009)	Legal origin	Stakeholder , shareholder
Kolk and Perego (2010)	Legal origin	Code, Common law
Orij (2010)	Country orientation	Stakeholder, shareholder

The Presence of a CSR Committee

Table 3.10 displays various measurement scenarios for the presence of a CSR committee. This variable is measured by a dummy variable that takes the value of 1 if the company has a CSR committee and 0 otherwise.

Table 3.10 Previous Studies Measures for the Presence of CSR Committee Measurement

Study	Measurement
Cowen, Ferreri and Parker (1987)	Dummy variable: 1 if the firm has a social responsibility committee, 0 otherwise.
Al-Tuwaijiri, Christensen and Hughes (2004)	Dummy variable: 1 if the firm has an environmental committee, 0 otherwise.
Mallin and Michelon (2011)	Dummy variable: 1 if the company has a committee in charge of CSR/ethics/sustainability matters, 0 otherwise.
Rankin, Windsor and Wahyuni (2011)	Dummy variable of environmental committee: which 1 if the firm has a specific environmental committee, 0 otherwise.

Michelon and Parbonetti (2012)	Dummy variable equal to 1 if company has identified a person in charge of social responsibility issues, 0 otherwise.
--------------------------------	--

The empirical governance literature suggests that the presence of a CSR committee increases the level of corporate communication because its independence will foster board effectiveness (Haniffa and Cooke 2005; Said, Zainuddin and Haron 2009). In short, prior studies suggest that the presence of a CSR committee affects the level of corporate social responsibility disclosure.

3.2.3.3 Control Variables

Two control variables will be employed in this thesis. These are leverage and profitability. The selection of control variables is based on previous studies. Past studies have often used leverage as an indicator to measure the liquidity or solvency faced by companies. Leverage is measured as the ratio of total liabilities to total assets. Brammer and Pavelin (2008) and Reverte (2009) argue that a low degree of leverage ensures that creditor stakeholders will seek to constrain managers' discretion over CSR activities less, because such activities are only indirectly linked to the financial success of the firm. Prior studies on disclosure find that leverage is often negatively related to corporate social responsibility disclosure (see for example Belkaoui and Karpik 1989; Branco and Rodrigues 2008).

Return on Assets (ROA) is used as the control variable proxy to measure profitability. Firms with high profitability are more likely to reveal their good news and tend to have higher levels of CSRD (Aerts and Cormier 2009). ROA is measured as of the ratio of total net profit divided by total assets.

3.3 Statistical Analysis

This thesis employs several statistical techniques to test the five hypotheses. Ordinary Least Squares (OLS) multiple regressions are used as the main statistical technique to test these hypotheses. The regression model¹⁹ used is:

$$CSRD = \beta_0 + \beta_1 Firm\ Size + \beta_2 Industry\ Type + \beta_3 Presence\ of\ Voluntary\ Assurance + \beta_4 Jurisdictional\ Business\ Systems + \beta_5 Presence\ of\ CSR\ Committee + \beta_6 Leverage + \beta_7 Profitability + \varepsilon$$

Independent samples t-tests will be also used to test whether there is a significant difference between the extent of corporate social responsibility disclosure in high-and low-profile industries, companies which have their sustainability reports assured and those that do not, and firms which have a CSR committee or not. The one-way ANOVA test is then employed to test whether there is a significant difference in the extent of CSRD among the three jurisdictional business systems: Anglo-American, communitarian, and emerging market. This thesis also utilises Pearson correlation to examine the associations between the dependent and predictor variables.

3.4 Summary

This chapter outlines the methodological choices and the research methods undertaken in this study. It details the the ontological, epistemological and methodological research paradigms underlying this thesis. In particular, this thesis adopts the positivist quantitative approach for this corporate social responsibility disclosure (CSRD) study. Both the

¹⁹ This thesis also tests the assumptions underlying the regression model before running the regression estimation. These assumptions include normality, linearity, homoscedasticity, and multicollinearity. First, the normality assumption is examined via *Kolmogorov-Smirnov* tests. Second, the linearity assumption is examined via scatter plots. Third, the scatter plot and *Glesjer test* are employed to examine heterocedasticity problems. Multicollinearity is analysed using the tolerance value as well as *the Variation Inflation Factor* (VIF). Finally, the outliers are explored using *Mahalanobis* and *Cook's* distance scores.

specific research methods and the key research questions about how best to predict the extent of CSRD are detailed. Consistent with many past studies and with the tenets of legitimacy theory, this thesis examines firm size, industry type, the presence of a voluntary assurance statement, jurisdictional business systems and the presence of a CSR committee as determinants of CSRD.

In addition, this chapter indicates that leverage and profitability are the two control variables used in the regression models to control for compounding effect of cross sectional factors. An outline of the statistical analyses (ordinary least squares (OLS) multiple regressions, independent samples t-test, one-way ANOVA, and Pearson correlations ends the chapter.

Chapter four presents the descriptive statistics and univariate analysis. It begins with an overview of actual CSRD reporting practices across jurisdictions and countries. This is followed by an analysis of the global corporate social responsibility disclosure practices in aggregate and in major categories. Then, univariate analysis examines the potential influence of industry type, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee.

CHAPTER FOUR

DESCRIPTIVE STATISTICS AND UNIVARIATE ANALYSIS

4.0 Introduction

This chapter reviews the descriptive statistics used and univariate tests carried out (independent samples t-tests, paired samples t-tests, and one-way ANOVA). Section 4.1 presents the levels and themes of global corporate social responsibility disclosure. Section 4.2 contains a brief overview of the statistics for the levels and themes of corporate social responsibility disclosure per country. Sections 4.3 to 4.6 provide a detailed analysis of the global CSRD practices at for different groupings levels, i.e. core and additional indicators. Sections 4.7 to 4.10 then supply univariate²⁰ analysis by looking at industry type, the presence of a voluntary assurance statement, jurisdictional business systems and the presence of a CSR committee respectively. Section 4.11 extends this treatment by a univariate analysis of each individual indicator of CSRD by industry type, presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee. Finally, Section 4.12 summaries of the chapter's findings.

4.1 Levels and Themes of Global CSRD

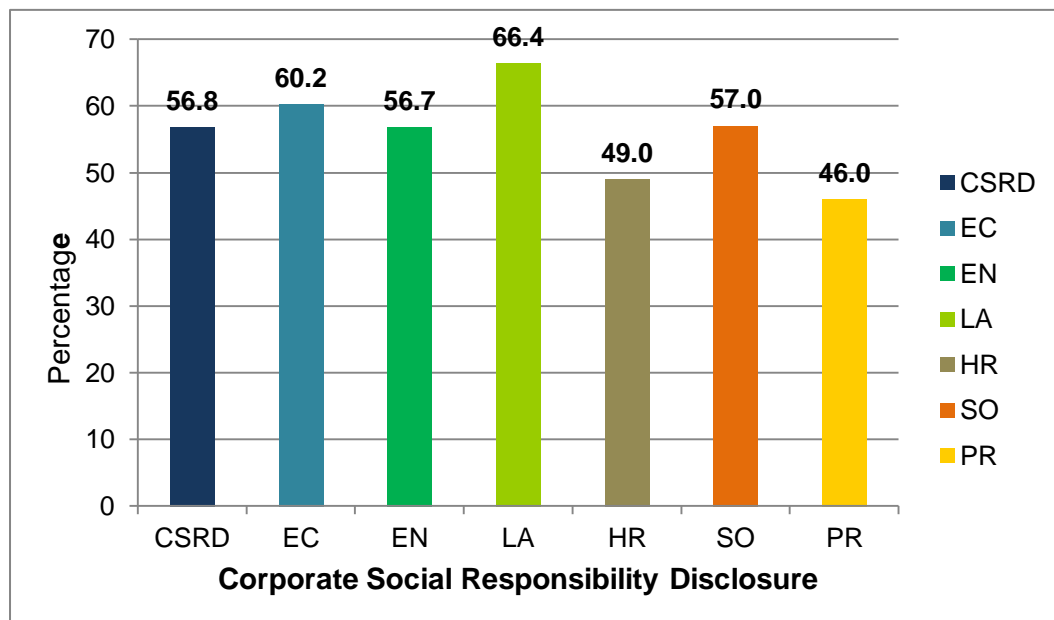
This section provides an overview of the corporate social responsibility disclosure of the 460 sample global companies from 44 countries in 2009, as shown in Figure 4.1. Figure 4.1 displays the mean of the CSRD index, i.e. the average accross the six themes of CSRD. It also shows average levels of disclosure for each of the six key themes of corporate social responsibility disclosure, namely: Economic (EC), Environmental (EN),

²⁰ Univariate statistics are performed to identify any significant differences in these CSRD practices between high and low profile industries, assured and not assured, and across jurisdiction business systems. This tests are important to establish if these variables are key determinants.

Labour Practices (LA), Human Rights (HR), Society (SO), and Product Responsibility (PR).

As shown in Figure 4.1, the overall mean of CSRD is 56.8 percent. This result indicates that on average these large global companies communicate a slight majority of the total possible CSRD indicators. This higher level of corporate social responsibility disclosure supports the decision to focus solely on sustainability reports.

Figure 4.1 Levels of CSRD Themes



Columns display the mean for overall CSRD (corporate social responsibility disclosures), and six key themes of CSRD: EC (economic), EN (environmental), LA (labour practices), HR (human rights), SO (society), and PR (product responsibility).

The results shown in Figure 4.1 indicate that, of the six themes, labour practices (LA) have the highest average level of disclosure in sustainability reports (66.4 percent), followed by economic (EC) 60.2 percent, society (SO) 57.0 percent, environmental (EN) 56.7 percent, human rights (HR) 49.0 percent, and product responsibility (PR) 46.0 percent. These results indicate that the companies disclosed more labour information than other CSR themes in their sustainability reports, suggesting these companies

may be concerned about labour issues. It is noteworthy that some companies do not disclose any economic, environmental, labour practices, human rights, society, and product responsibility information in their sustainability reports. While, in stark contrast, a few companies had 100 percent disclosure in certain themes. The findings shown in Figure 4.1 are consistent with those previous studies²¹.

Pratten and Mashat (2009) note that Libyan companies disclose at least one of the five categories in employee disclosures. Andrew et al. (1989) find that human resources is the theme most disclosed by Malaysian and Singaporean companies. They reason that companies in developing countries may be very aware of their government's concern to improve the working conditions and living standards of the workers. Islam and Deegan (2010) provide evidence that labour practices in developing countries have frequently been the object of global criticisms. Their study find that companies reacted to mitigate media pressures by providing positive labour disclosures. The findings in this thesis highlight the improvement in disclosures about labour practices in emerging market—perhaps in response to such pressures.

Table 4.1 highlights the levels and key themes of corporate social responsibility disclosure for overall and each jurisdiction. Interestingly, companies in the emerging market jurisdiction have the highest average level of CSRD (60.4 percent). This is followed by companies in communitarian (55.3 percent) and Anglo-American jurisdictions (54.7 percent).

²¹ Teoh and Thong (1984), Newson and Deegan (2002), Gunawan, Djajadikerta and Smith (2009), and Azim, Ahmad and Islam (2009) find that the human resources theme is the most highly disclosed by companies.

Table 4.1 Levels and Key Themes of CSRD

Themes	Overall	Emerging Market	Communitarian	Anglo-American
CSRD	56.8*(24.2)	60.4	55.3	54.7
Economic	60.2 (28.6)	66.7	60.8	55.4
Environmental	56.7 (25.3)	58.1	57.3	56.5
Labour Practices	66.4 (26.1)	72.4	69.7	58.5
Human Rights	49.0 (33.9)	52.9	51.1	44.0
Society	57.0 (31.8)	60.0	58.0	53.9
Product Responsibility	46.0 (33.2)	50.4	48.6	39.9
	N = 460	N = 103	N = 195	N = 162

Average of overall CSRD and six key themes of CSRD in various jurisdictions. The descriptive statistics are expressed in percentage. CSRD = corporate social responsibility disclosure. *(Standard Deviation).

Regarding the key themes of corporate social responsibility disclosure, it can be seen that labour practices are the most disclosed theme in all jurisdictions. The results also show that companies in emerging market jurisdictions lead communicating in every major theme of CSRD.

- For the economic theme, emerging market disclosure is 66.7 percent whilst it is 60.8 percent for communitarian and 55.4 percent for Anglo-American.
- The environmental disclosure levels are much close, at 58.1 percent for emerging market, 57.3 percent for communitarian and 56.5 percent for Anglo-American jurisdictions.
- Levels of disclosure for labour practices and decent work show a similar trend, albeit with higher sets of scores, with emerging market 72.4 percent, communitarian 69.7 percent and Anglo-American 58.5 percent.
- Human rights level of disclosure scores are 52.9 percent for emerging market, 51.1 percent for communitarian and only 44.0 percent for Anglo-American.

- Scores of society-related indicators are somewhat higher, with 60.0 percent for emerging market, 58.0 percent for communitarian and 53.9 percent for Anglo-American.
- Finally, disclosures for the product responsibility theme are 50.4 percent for emerging market companies, 48.6 percent for communitarian and only 39.9 percent for Anglo-American.

Overall, emerging market companies consistently have the highest level of communication across all themes and Anglo-American companies the lowest. These findings indicate that companies in emerging market countries have a surprisingly high level of commitment to and participation in corporate social responsibility. As reported by the United Nations Conference on Trade and Development (UNCTAD) survey in 2008, 25 of 100 large companies in emerging market countries have implemented at least half the indicators recommended in UNCTAD' Guidance in Corporate Social Responsibility Indicators and the GRI (2006) Guidelines. This finding suggests that these emerging market companies are more willing to communicate CSR information in their sustainability reports.

4.2 Overview of Levels and Themes of CSRD per Country

Table 4.2 lists the levels and themes of CSRD per country. From emerging market areas, Brazil (73.3 percent), Mexico (73.0 percent), and India (70.7 percent) have the top three scores for the CSRD index, while the three lowest-scoring emerging nations are Thailand (46.2 percent), China (49.7 percent) and Turkey (49.8 percent). From the communitarian jurisdictions, the highest CSRD indices are those of companies from Spain (81.1 percent), Portugal (75.5 percent), and Italy (73.8 percent), whilst companies from Norway (32.0 percent), Denmark (37.9 percent), and Japan (40.3 percent) have the lowest CSRD indices. Finally, companies from Australia (62.6 percent), Canada (58.0 percent), and the US (49.5 percent) are those from the Anglo-American jurisdictions that have the

three highest CSRD indices, whereas companies from Singapore (40.8 percent) and the UK (47.5 percent) are those that have the two lowest CSRD indices.

Table 4.2 Levels and Key Themes of CSRD by Country

Country	Themes						
Emerging Market	CSRD	EC	EN	LA	HR	SO	PR
Colombia*	89.8	100	90.0	100	78.0	88.0	78.0
Indonesia*	89.8	100	83.0	86.0	100	100	89.0
Chile*	82.2	83.3	76.6	85.7	83.3	81.2	94.4
Brazil	73.3	73.1	66.1	82.7	79.6	82.2	68.5
Mexico	73.0	50.7	76.6	78.5	76.1	80.3	65.0
India	70.7	77.7	65.4	79.2	71.7	71.5	66.6
Malaysia	69.6	77.7	68.3	78.5	72.2	65.6	52.7
Argentina*	68.9	88.8	41.6	92.8	72.2	93.7	77.7
Taiwan	63.8	64.4	56.0	82.8	64.4	62.5	60.0
South Africa	59.9	75.4	59.0	74.4	49.2	60.7	34.9
Israel*	59.4	100	67.0	79.0	11.0	25.0	44.0
Hungary*	54.4	55.5	45.0	78.5	55.5	62.5	38.8
Croatia*	52.5	38.8	58.3	57.1	61.1	68.7	16.6
Philippines	50.6	50.0	52.5	66.0	38.8	43.7	38.8
UAE	50.6	59.2	44.4	71.4	29.6	33.3	37.0
Turkey	49.8	60.0	43.3	65.7	31.1	50.0	55.5
China	49.7	62.3	51.6	61.9	27.7	46.5	36.4
Russia*	49.3	50.0	50.0	60.7	44.4	31.2	50.0
Thailand	46.2	55.5	55.0	50.0	25.0	25.0	41.6
Nigeria*	45.5	100	40.0	57.0	33.0	50.0	22.0
Sri Lanka*	19.6	22.2	13.3	42.8	11.1	12.5	16.6
Communitarian							
Spain	81.1	85.1	78.6	91.9	79.2	77.5	73.3
Portugal	75.5	80.0	76.3	87.8	58.8	75.0	66.6
Italy	73.8	75.8	72.5	87.3	64.0	79.4	60.1
South Korea	68.9	78.6	63.3	87.7	70.5	71.1	69.6
Austria	66.5	76.1	51.4	72.4	55.5	75.0	66.6
Germany	63.4	64.2	59.0	77.5	57.9	75.0	50.7
Greece	60.7	63.6	59.3	74.6	53.5	44.3	62.6
Finland	54.4	46.6	59.3	68.5	42.2	57.5	33.3
Sweden	49.5	47.0	51.0	58.2	49.5	50.9	32.4
Switzerland	48.9	61.7	45.1	56.3	46.9	50.0	38.2
The Netherlands	46.2	48.8	48.2	57.6	31.8	45.8	34.0
France	44.0	45.1	48.0	57.1	34.8	34.1	27.4
Belgium	41.1	38.8	41.6	52.3	31.4	43.7	31.4
Japan	40.3	36.2	45.2	43.2	29.8	37.5	36.2
Denmark	37.9	37.7	46.0	47.1	22.2	35.0	15.5
Norway	32.0	51.8	21.1	45.2	40.7	37.5	14.8

Table 4.2 continued

Country	Themes						
Anglo-American	CSR	EC	EN	LA	HR	SO	PR
Ireland*	66.4	55.5	65.0	82.1	61.1	56.2	72.2
Australia	62.6	67.1	63.6	68.4	51.3	69.2	50.9
New Zealand*	58.2	61.1	63.3	71.4	44.4	37.5	50.0
Canada	58.0	64.1	60.0	58.7	53.8	58.1	48.2
US	49.5	51.6	52.4	56.6	41.1	49.6	35.2
UK	47.5	50.7	50.1	51.6	40.3	51.2	33.7
Singapore	40.8	33.3	44.1	64.2	8.3	40.6	33.3

Average overall CSR and six key themes of CSR in each country. The descriptive statistics are expressed in percentage. * these countries are only represented by 1-2 companies in this thesis sample, therefore, so they are excluded when results are interpreted in the main text. CSR = corporate social responsibility disclosure. EC = economic. EN = environmental. LA = labour practices. HR = human rights. SO = society. PR = product responsibility.

Some of the higher and lower levels of CSR for each of the six themes will now be briefly discussed. For the communication of labour practices index, Spain has the highest levels (91.9 percent), followed by Portugal (87.8 percent), and South Korea (87.8 percent). Spanish firms may well have the highest labour disclosure because they have implemented the SA8000²² standard. As cited by Fuentes-Garcia, Nunez-Tabales and Veroz-Herradon (2008), the aim of the SA8000 standard is to improve labour conditions. The Spanish standard requires that companies engaging in CSR must verify their labour information, such as having minimum standards for basic labour rights, health and safety, salary levels, etc. The second most disclosed theme by companies in each country is economic. Spanish firms again disclosed the most economic theme in their sustainability reports (85.1 percent), followed by Portuguese (80.0 percent), and South Korean firms (78.6 percent). Conversely, Singapore (33.3 percent), Japan (36.2 percent), and Denmark (37.7 percent) are the three countries in which the communication of economic theme is the

²² The SA8000 is a standard system that pertains to the human rights of workers. It is produced by Social Accountability International (SAI), an independent, non-governmental, not-for-profit organisation which provides certification services via certification bodies accredited by the Social Accountability Accreditation Services Agency (Social Accountability 2008).

least. This result is consistent with the KPMG (2008) survey, which finds that, overall, economic is the main driver of reporting CSR activities.

The third highest disclosed theme by firms is that of society. Brazilian firms have the most information disclosed about their activities in Brazilian society (82.2 percent), followed by Mexican firms (80.3 percent), and then Italian (79.4 percent) firms. The three countries that have the lowest level of information disclosed in the theme of society are Thailand (25.0 percent) and the United Arab Emirates (33.0 percent), and France (34.1 percent). As for the environmental theme, Spanish firms again have the highest level of information most dissemination (78.6 percent), followed by Mexican firms (76.6 percent), and Portuguese (76.3 percent) firms. Conversely, companies from Norway (21.1 percent), Belgium (41.6 percent), and Turkey (43.3 percent) provide the least information about their environmental activities in their sustainability reports. Brazilian firms disclosed the most about their human rights activities (79.6 percent), followed by Spanish firms (79.2 percent), and Mexican firms (76.1 percent). In contrast, Singaporean firms (8.3 percent), Danish firms (22.2 percent), and Thai (25.0 percent) disclose the least. Finally, product responsibility theme is most disclosed by companies from Spain (73.3 percent), South Korea (69.6 percent), and Brazil (68.5 percent). Whilst firms from Norway (14.8 percent), Denmark (15.5 percent), and France (27.4 percent) disclosed the least about product responsibility (see Table 4.2 for details). Overall, these results show that the emerging market companies have the highest levels of CSRD. Meanwhile, at the country level, Spain is the country with the highest level of CSRD.

4.3 Levels of CSRD-core and CSRD-additional Indicators

The six key CSRD themes are displayed in Table 4.1. Each theme corresponds to a set of core and additional performance indicators²³. The GRI (2006) states that the core indicators are intended to identify generally applicable indicators and are assumed to be material for most companies. Moreover, additional indicators are thought to represent emerging practice or address topics that may be material for some companies, but not for others (GRI 2006).

Table 4.3 gives the descriptive statistics of CSRD based on the GRI (2006) core and additional indicators, and presents the result of paired sample t-tests. A clear finding is that the mean of CSRD-core indicators is consistently higher (64.2 percent) than that of CSRD-additional indicators (44.8 percent), and the difference between the two is statistically significant. The results may imply that some CSRD-additional indicators are only used by some companies to communicate broader contextual information that is required by stakeholders (GRI 2006).

Table 4.3 Descriptive Statistics for CSRD-core and CSRD-additional Indicators and Paired Samples t-tests

Variables	Mean	Median	Std. Deviation	Minimum	Maximum	
CSRD-core	64.2	65.0	24.8	6.0	100	
CSRD-additional	44.8	43.0	27.9	0.0	100	
	Pair Differences			t	df	Sig.
	Mean	Std. Deviation	Std. Error Mean			
Pair1Core - Additional	.194	.196	.009	21.1	459	.000***

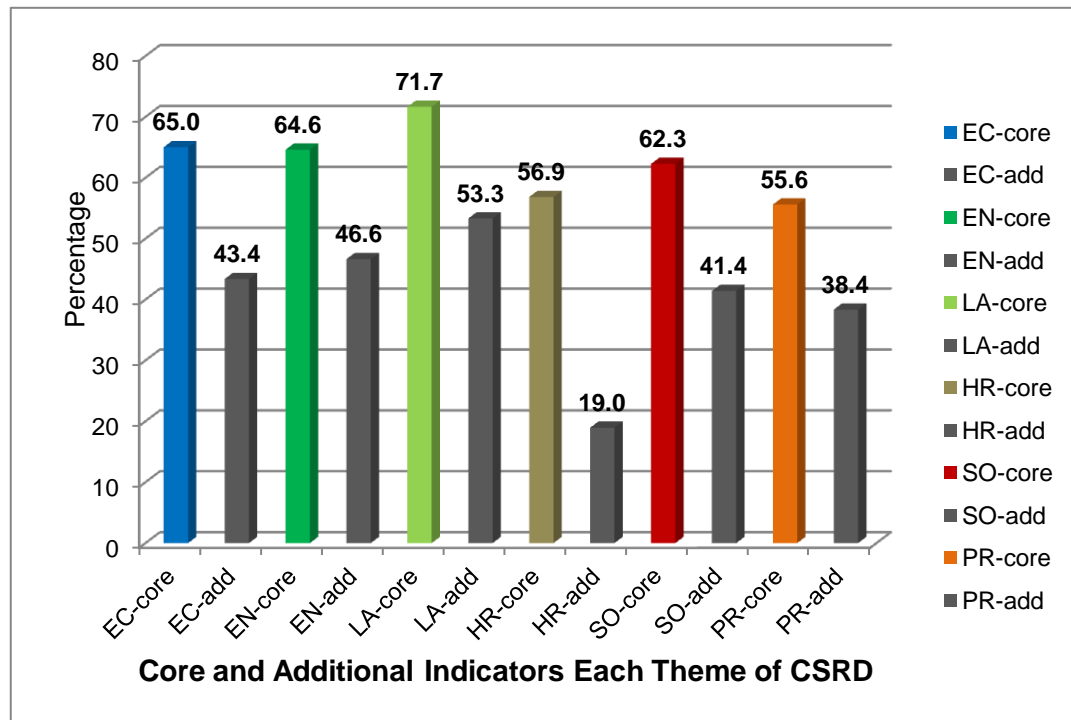
The descriptive statistics reported are expressed in percentages. Std.Deviation = standard deviation. CSRD = corporate social responsibility disclosure. The paired samples t-tests are performed by comparing the mean of CSRD-core and CSRD-additional indicators. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 confidence levels respectively.

²³ Refer to Appendix A for more details.

4.4 Levels of Core and Additional Indicators for Each CSRD Theme

Figure 4.2 reveals the mean scores for the CSRD-core and CSRD-additional indicators for each key theme.

Figure 4.2 Core and Additional Indicators for Each Theme of CSRD



Each column displays the mean of the core and additional indicators for the six key themes of CSRD: EC = economic, EN = environmental, LA =labour practices, HR = human rights, SO = society, PR = product responsibility. “Core” refers to the core indicators and “Add” refers to the additional indicators.

Consistent with the results provided in Table 4.1, the mean of labour practices, LA-core indicators (71.7 percent) is the highest disclosure indicator communicated by companies. This is followed by economic, EC-core indicators (65.0 percent), the third highest disclosed is environmental, EN-core indicators (64.6 percent). This result somewhat differs from the finding in Table 4.1 where the theme of society have the third highest level of overall disclosure by companies. Figure 4.2 also shows that the mean for all core indicators is higher than that for additional indicators.

The paired samples t-tests shown in Table 4.4 confirm that there is a significant difference between core and additional disclosure indicators for all themes. Consistent with the results of the paired samples t-tests in Table 4.3, these results suggest that companies disclose a higher number of core indicators for all themes than they do for additional indicators.

Table 4.4 Paired Samples t-tests for Core and Additional Indicators

	Paired Differences			t	Df	Sig.
	Mean	Std. Deviation	Std. Error Mean			
Pair1 EC-core - EC-add	.21663	.34546	.01611	13.449	459	.000***
Pair2 EN-core - EN-add	.17966	.24279	.01132	15.871	459	.000***
Pair3 LA-core - LA-add	.18337	.29291	.01366	13.427	459	.000***
Pair4 HR-core - HR-add	.37899	.24901	.01161	32.642	459	.000***
Pair5 SO-core - SO-add	.20870	.35349	.01648	12.662	459	.000***
Pair6 PR-core - PR-add	.17250	.30203	.01408	12.250	459	.000***

The paired samples t-tests are performed by comparing the means of core and additional indicators for the following themes economic (EC), environmental (EN), labour practices (LA), human rights (HR), society (SO), and product responsibility (PR) themes. Std. Error Mean = standard error mean. "Core" refers to the core indicators and "Add" refers to the additional indicators. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 confidence levels respectively.

4.5 Levels of Core and Additional Indicators for Each Category

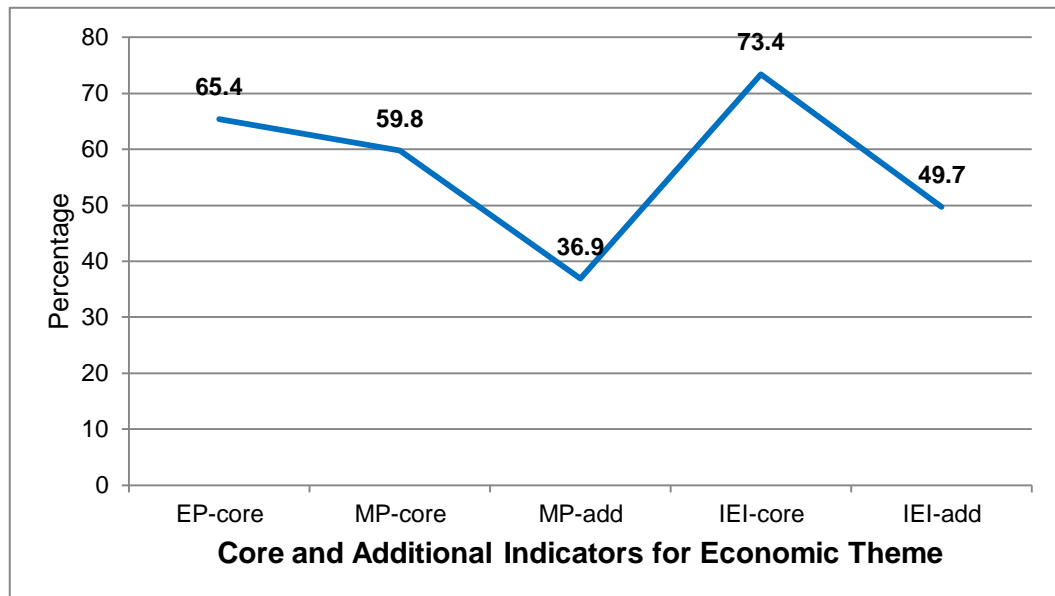
Figures 4.3-4.8 display the means of the core and additional disclosure indicators for each category²⁴ of the GRI. Figure 4.3 shows that indirect

²⁴As discussed earlier, the GRI (2006) guidelines consist of six themes. Each theme is further broken down into several categories:

- The economic theme consists of three categories; these are economic performance, market presence, and indirect economic impact.
- The environmental theme consists of nine categories; these are materials, energy, water, biodiversity, emissions, effluents and waste, product and services, compliance, transport, and overall.
- The labour practices theme consists of five categories; these are employment, labour/management relations, occupational health and safety, training and education, and diversity and equal opportunity.
- The human rights theme consists of seven categories; these are investment and procurement practices, non-discrimination, freedom of association and collective bargaining, child labour, forced and compulsory labour, security practices, indigenous rights.

economic impact²⁵-IEI-core is the highest indicator (73.4 percent) communicated by companies while the lowest is market market presence²⁶, MP-additional indicator (36.9 percent).

Figure 4.3 Economic Themes: Core and Additional



Graph displays the means of the core and additional indicators for economic themes. EP²⁷ = economic performance. MP = market presence, IEI = indirect economic impact. “Core” refers to the core indicators and “Add” refers to the additional indicators.

- The society theme consists of five categories; these are community, corruption, public policy, anti-competitive behaviour, and compliance.
- The product responsibility theme consists of five categories; these are customer health and safety, product and service labelling, marketing communications, customer privacy, and compliance

²⁵Indirect economic impact (IEI) categories consist of two indicators:

- The IEI-core indicator (coded as EC8). This indicator measures the development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or *pro bono* engagement.
- The IEI-additional indicator (coded as EC9). This indicator measures the understanding of significant indirect economic impacts.

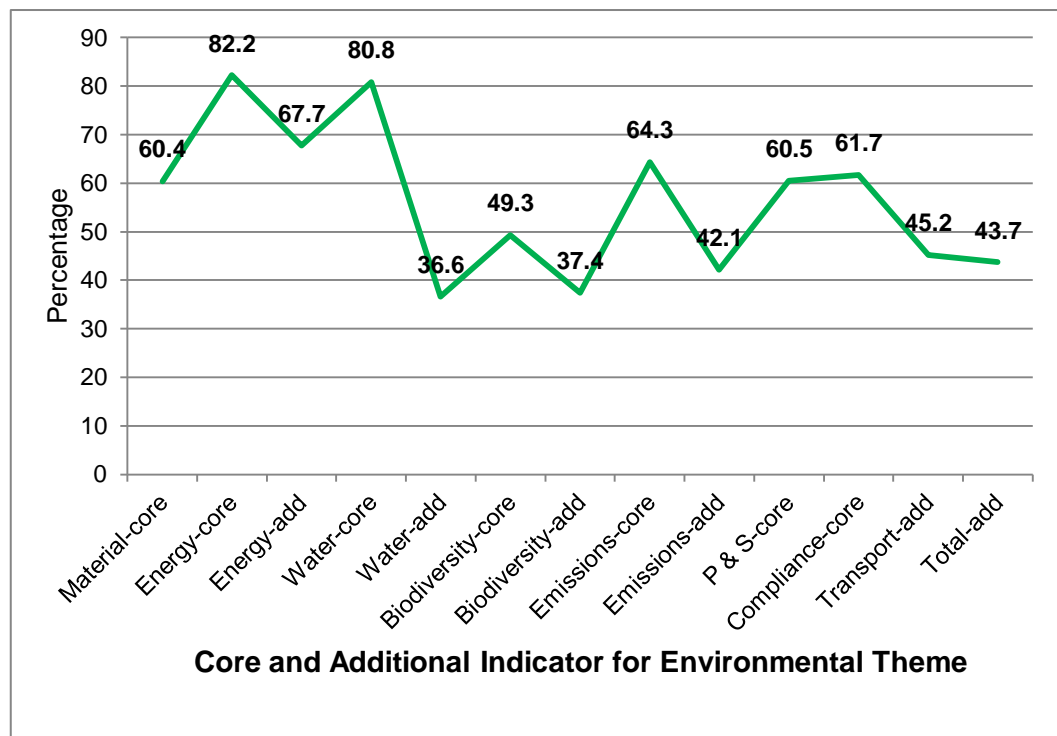
²⁶Market presence (MP) categories consist of three indicators:

- The MP-core indicators (coded as EC6 and EC7). EC6 measures policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation. EC7 measures procedures for local hiring and the proportion of senior management hired from the community at significant locations of operation.
- The MP-additional indicator (coded as EC5). EC5 measures the range of ratios of standard entry level of wage compared to local minimum wage at significant locations of operation.

²⁷ No additional indicator for Economic performance (EP) indicators (see to Appendix A for details).

Figure 4.4 reveals the means of the core and additional indicators for environmental categories. Energy²⁸-core (82.2 percent) is the most communicated indicator by companies, whilst water²⁹-additional (36.6 percent) is the least disclosed indicator by companies.

Figure 4.4 Environmental Themes: Core and Additional



Graph displays the means of core and additional indicators for environmental themes. Material³⁰, P and S³¹ = product and service. Emissions = emissions, effluents and waste. “Core” refers to the core indicators and “Add” refers to the additional indicators.

²⁸Energy categories consist of five indicators:

- The energy-core indicators (coded as EN3 and EN4). EN3 measures the direct energy consumption by primary energy sources, while EN4 assesses indirect energy consumption by primary sources.
- The energy-additional indicators (coded as EN5 – EN7).

²⁹Water categories consist of three indicators:

- The water-core indicator (coded as EN8).
- The water-additional indicators (coded as EN9 and EN10). EN9 quantifies the water sources significantly affected by withdrawal of water. EN10 measures the percentage and total volume of water recycled and reused.

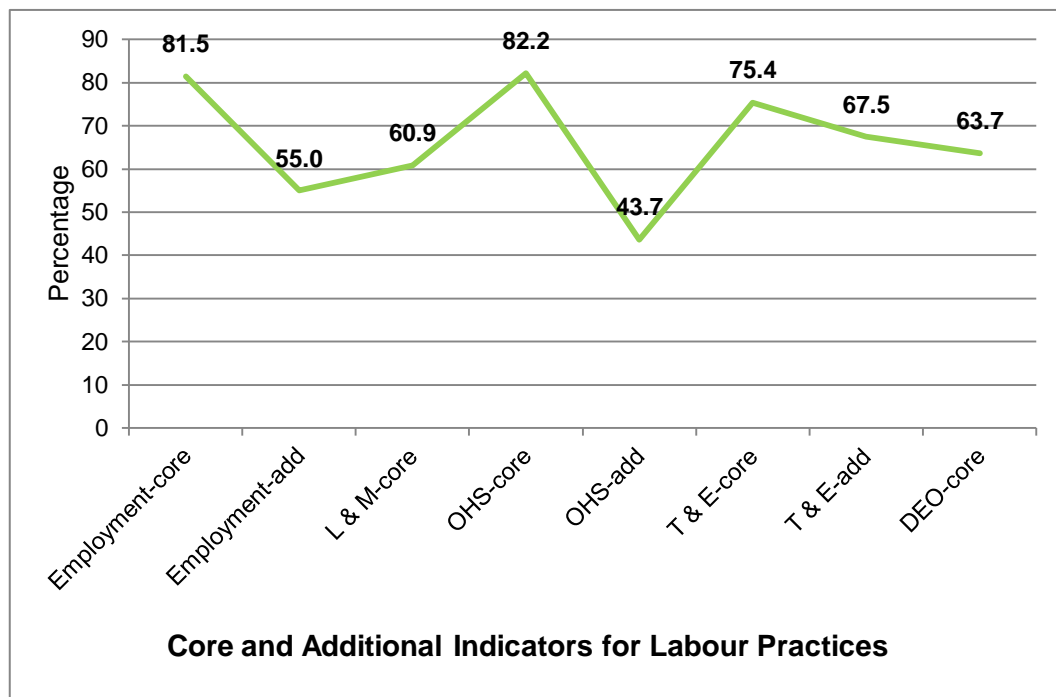
³⁰Material categories consist of two indicators:

- The material-core indicators (coded as EN1 and EN2).
- No additional indicator for material category.

³¹Product and services (P and S) categories consist of two indicators: EN26 and EN27.

- No additional indicator for Pand S and compliance category.
- No core indicator for transport and total category.

Figure 4.5 Labour Practices Themes: Core and Additional



Graph displays the means of core and additional indicators for L and M³² = labour/management relations. OHS = occupational health and safety. T and E = training and education. DEO³³ = diversity and equal opportunity. “Core” refers to the core indicators and “Add” refers to the additional indicators.

Figure 4.5 highlights the means of core and additional category indicators for labour practices. It can be seen that occupational health and safety, OHS-core³⁴ (82.2 percent) represents greater number of indicators

³²Labour/management relations (L and M) categories consist of two indicators:

- The L and M-core indicators (coded as LA4 and LA5). LA4 measures the percentage of employees covered by collective bargaining agreements. LA5 measures Minimum Notice Period (s) regarding significant operational changes, including whether these are specified in collective agreements.
- No additional indicator for L and M category.

³³Diversity and equal opportunity (DEO) categories consist of two indicators:

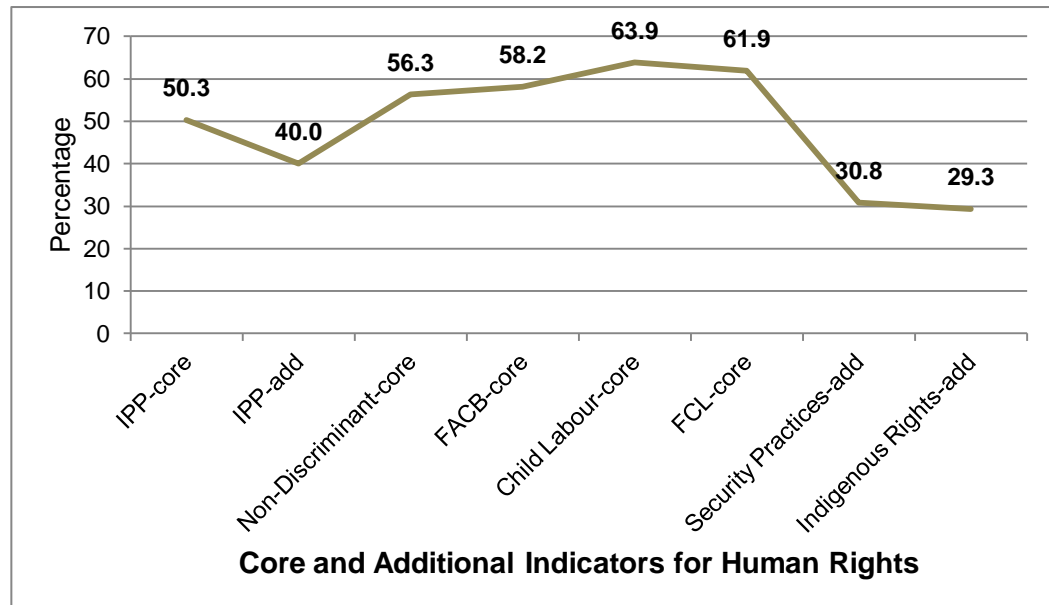
- The DEO-core indicators (coded as LA13 and LA14). No additional indicator.

³⁴Occupational Health and Safety (OHS) categories consist of four indicators:

- The OHS-core indicators (coded as LA7 and LA8). LA7 determines the rates injury, occupational diseases, lost days, and absenteeism, and the total number of work-related fatalities by region. LA8 measures the education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.
- The OHS-additional indicators (coded as LA6 and LA9). LA6 computes the percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on OHS programs. LA9 evaluates the health and safety topics covered in formal agreements with trade unions.

communicated by companies, whilst OHS-additional is the lowest (43.7 percent).

Figure 4.6 Human Rights Themes: Core and Additional



Graph displays the means of core and additional indicators for human rights. IPP³⁵ = investment and procurement practices. FACB³⁶ = freedom of association and collective bargaining. FCL³⁷ = forced & compulsory labour. “Core” refers to the core indicators and “Add” refers to the additional indicators.

³⁵Investment and Procurement Practice (IPP) categories consist of three indicators:

- IPP-core (coded as HR1 and HR2). HR1 measures percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening. HR 2 measures percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.
- The IPP-additional indicator (coded as HR3). HR3 measures total hours of employees training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.

³⁶The freedom of association and collective bargaining (FACB) category consists of a core indicator only (coded as HR5).

- No additional indicator for this category.
- No additional indicator for non-discriminant category.
- No core indicator for security practices category.

³⁷Forced and compulsory labour (FCL) category consists of a core indicator only (coded as HR7).

- No additional indicator for this category.

Figure 4.6 presents the means of the core and additional indicators for human rights themes. Child labour-core³⁸ (63.9 percent) is the indicator most communicated by companies, whereas, the indicator indigenous-rights-additional³⁹ is the least-communicated (29.3 percent).

Figure 4.7 displays the means of the core and additional indicators for the society theme. The results show that community-core⁴⁰ (71.3 percent) is the indicator reported most often by companies, whilst, compliance-core⁴¹ (36.9 percent) is the least disclosed. Certain additional indicators, for example community, corruption, anti-competitive behaviour, and compliance are not disclosed by any companies.

³⁸The child labour category consists of a core indicator only (coded as HR6). HR6 assesses the operations identified as having significant risk for incidents of child labour and the measures taken to contribute to the elimination of child labour.

- No additional indicator for this category.

³⁹Indigenous rights category consists of an additional indicator only (coded as HR9). HR9 quantifies the total number of incidents of violations involving the rights of indigenous people and actions taken.

- No core indicator for this category.

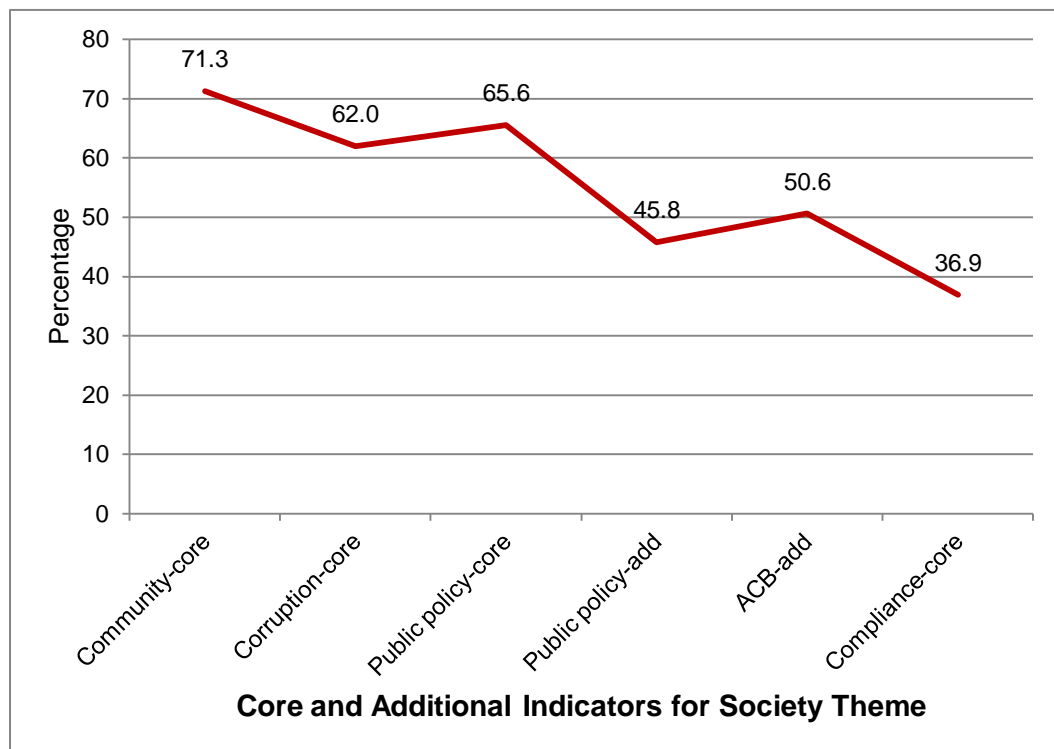
⁴⁰ The community category has a core indicator only (coded as SO1). SO1 measures the nature, scope, and effectiveness of any programs and practices that assess and manage the impact of operations on communities, including entering, and operating, and existing in communities.

- No additional indicator for this category.

⁴¹ The compliance category has a core indicator only (coded as SO8). SO8 measures the monetary value of significant fines and the total number of non-monetary sanctions for non-compliance with laws and regulations. No additional indicator for this category.

- No core indicator for the anti-competitive behaviour (ACB) category.
- No additional indicator for the corruption category.

Figure 4.7 Society Themes: Core and Additional



Graphs displays the means of core and additional indicators for society themes. ACB = anti competitive behaviour. “Core” refers to the core indicators and “Add” refers to the additional indicators.

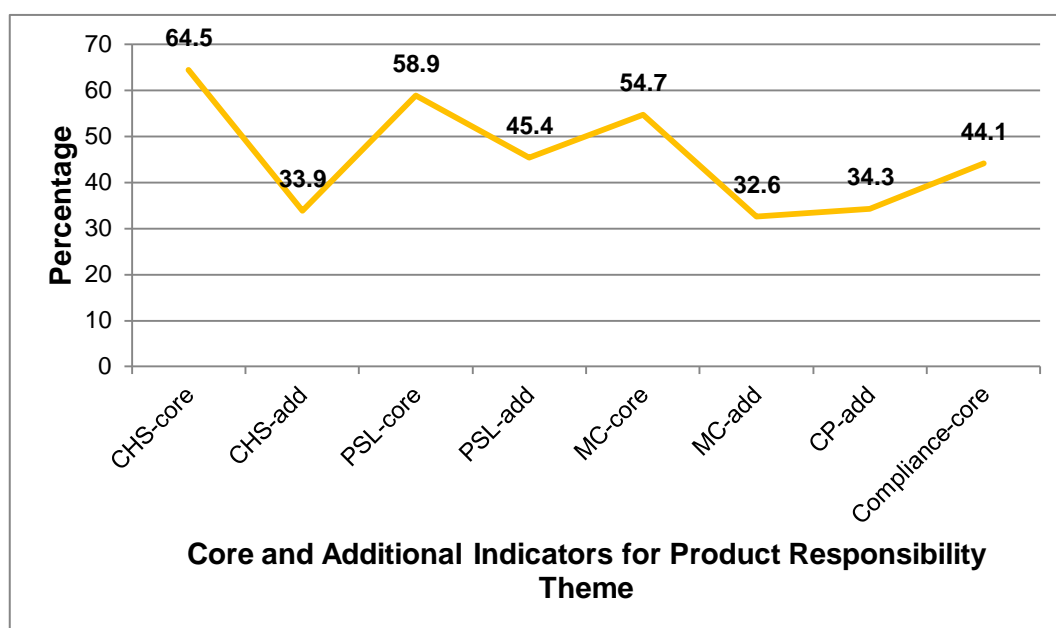
Figure 4.8 shows the means of the core and additional indicators for the product responsibility themes. Customer health and safety-core⁴² (64.5 percent) is the indicator most disclosed by companies, whereas marketing-communication- additional⁴³ (32.6 percent) is the least disclosed.

⁴²The customer health and safety (CHS) category consists of two indicators:

- The CHS-core indicator (coded as PR1). PR1 determines the life-cycle stages in which the health and safety impacts of products and services are assessed for improvement, and the percentage of significant products and services categories subject to such procedures.
- The CHS-additional indicator (coded as PR2). PR2 measures total number of incidents of non-compliance with regulations and voluntary codes relating to the health and safety impacts of products and services.

⁴³ Marketing-communications-additional (PR7) calculates the total number of incidents of non-compliance with regulations and voluntary codes that cover marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.

Figure 4.8 Product Responsibility Themes: Core and Additional



Graph displays the means of core and additional indicators for product responsibility. CHS = customer health and safety. PSL = product and service labelling. MC = marketing communications. CP⁴⁴ = customer privacy. “Core” refers to the core indicators and “Add” refers to the additional indicators.

4.6 Individual Indicators of CSRD

The results of the descriptive statistics displayed in Figure 4.1 and Table 4.1 are now expanded into more specific indicators. Table 4.5 presents the level of individual indicators of corporate social responsibility disclosure disclosed by companies. The shaded areas are the highest indicators disclosed.

In terms of economic themes, it can be seen that the majority of firms (86.1 percent) disclose a high level of information about economic performance-EC1, through information such as revenues, operating costs, compensations, donations, investments, retained earnings, and payments, whereas only 37.0 percent of firms reveal information relating to market

⁴⁴The customer privacy (CP) category has an additional indicator only (coded as PR8).

- No core indicator for CP category.
- No additional indicator for compliance category.

presence-EC5. Among these economic themes, information concerning the range of ratios of standard entry-level wages compared to local minimum wages at significant locations of operations is disclosed for less than any other indicator.

Pertaining to environmental themes, emissions, effluents, and waste indicator-EN16 is the most communicated (88.7 percent) by companies. EN16 is the indicator used to measure the total of direct and indirect greenhouse gas emissions by weight. The indicator least disclosed by firms is additional information about biodiversity-EN15 (22.4 percent). This indicator relates to the number of International Union for Conservation of Nature and Natural Resources (IUCN) red list and national conservation areas as affected by company operations.

Table 4.5 Levels of Individual Indicators of CSRD

GRI Indicators	Number of firms Disclosing	%
EC1 – Direct economic value	396	86.1
EC8 – Development and impact investments	338	73.5
EC2 – Financial implication	324	70.4
EC6 – Policy, practices, proportion of spending	284	61.7
EC3 – Benefit plan obligations	269	58.5
EC7 – Procedures for local hiring from community	267	58.0
EC9 – Indirect and extent of economics impacts	228	49.8
EC4 – Financial assistance from government	216	47.0
EC5 – Ratios of standard entry	170	37.0
EN16 – Direct and indirect greenhouse gas emissions	408	88.7
EN3 – Direct energy consumption	394	85.7
EN26 – Mitigate environmental impacts	376	81.7
EN8 – Total water withdrawal by source	372	80.9
EN22 – Weight of waste by type and disposal method	367	79.8
EN4 – Indirect energy consumption	363	78.9
EN18 – Reduction of greenhouse gas emissions	347	75.4
EN5 – Energy conservation and efficiency	328	71.3

Table 4.5 (continued)

GRI Indicators	Number of firms Disclosing	%
EN6 – Renewable and reduction energy	322	70.0
EN1 – Materials used by weight or volume	296	64.3
EN7 – Reduction of indirect energy consumption	285	62.0
EN28 – Fines and non-monetary sanctions	284	61.7
EN17 – Other indirect greenhouse gas emissions	283	61.5
EN20 – NO and SO and other air emissions	276	60.0
EN23 – Total number and volume of spills	267	58.0
EN21 – Water discharge by quality and destinations	260	56.5
EN2 – Materials used that they recycled	260	56.5
EN12 – Impacts of activities on biodiversity	235	51.1
EN14 – Actions and plans for managing biodiversity	219	47.6
EN11 – Land owned, leased & managed	219	47.6
EN19 – Emissions of ozone-depleting	211	45.9
EN29 – Environmental impacts of transporting	208	45.2
EN30 – Total environmental protection expenditure	201	43.7
EN13 – Habitats protected and restored	194	42.2
EN10 – Volume of water recycled and reused	183	39.8
EN27 – Products sold	181	39.3
EN9 – Water source affected by withdrawal of water	154	33.5
EN24 – Transported or treated waste	126	27.4
EN25 – Biodiversity value of water bodies	110	23.9
EN15 – List species and national conservation	103	22.4
LA1 – Total workforce	412	89.6
LA7 – Rates of injury, diseases, lost days	407	88.5
LA13 – Composition of governance bodies	354	77.0
LA8 – Education, training and counselling	350	76.1
LA10 – Average hours of training per year	347	75.4
LA2 – Total and rate of employee turnover	338	73.5
LA11 – Program for skills and lifelong learning	326	70.9
LA4 – Employees covered	324	70.4
LA12 – Employees' performance reviews	295	64.1
LA3 – Benefit provided for full time employees	253	55.0
LA5 – Minimum notice period	237	51.5
LA14 – Ratio of basic salary of men to women	232	50.4
LA6 – Management-worker health and safety	218	47.4
LA9 – Health and safety topics	184	40.0
HR6 – Child labour	294	63.9
HR7 – Forced and compulsory labour	285	62.0
HR5 – Freedom of association, collective bargaining	268	58.3
HR2 – Screening on human rights and actions taken	261	56.7
HR4 – Incidents of discrimination and actions taken	259	56.3
HR1 – Investment agreements	202	43.9

Table 4.5 (continued)

GRI Indicators	Number of firms Disclosing	%
HR3 – Policy and procedures' human rights aspects	184	40.0
HR8 – Security practices	142	30.9
HR9 – Indigenous rights	135	29.3
SO1 – Community	328	71.3
SO3 – Anti-corruption policies and procedures	320	69.6
SO5 – Public policy development	302	65.7
SO2 – Corruption	270	58.7
SO4 – Actions taken in response corruption	265	57.6
SO8 – Fines and sanctions for non compliance	233	50.7
SO6 – Financial contributions to political parties	211	45.9
SO7 – Anti competitive behaviour	170	37.0
PR1 – Health and safety products & services	297	64.6
PR3 – Type of product and service information	271	58.9
PR5 – Customer satisfaction survey	269	58.5
PR6 – Marketing communication program	252	54.8
PR9 – Compliance	203	44.1
PR8 – Customer privacy	158	34.3
PR2 – Incidents of non-compliance	156	33.9
PR7 – Advertising, promotion and sponsorship	150	32.6
PR4 – Product and service labelling	149	32.4

Percentage of firms' CSRD in each indicator from the six themes. CSRD = corporate social responsibility disclosure. EC = economic. EN = environmental. LA = labour practices. HR = human rights. SO = society. PR = product responsibility. Total sample = 460.

Regarding labour practices themes, employment-LA1 is the most popular indicator (89.6 percent) released by firms. LA1 relates to information about the total workforce by employment type, contract, and region. In contrast, occupational health and safety-LA9 indicators such as data about health and safety topics covered in formal agreements with trade unions are the indicator disclosed least often by firms (40.0 percent). As regards to human rights themes, the child labour indicator-HR6 is the most communicated indicator by companies in their sustainability reports (63.9 percent), whereas the least communicated (29.3 percent) related to indigenous rights-HR9. As for themes relating to society, community-SO1 is the indicator most disclosed by companies (71.3 percent), while the anti-competitive behaviour-SO7 indicator is the least disclosed (37.0 percent).

As for product responsibility, customer health and safety-PR1 has the highest score (64.6 percent) and the lowest (32.4 percent) is for the product and service labelling-additional indicator-PR4.

4.7 Descriptive Statistics and Univariate Analysis for Industry Type

This section shows the results of the descriptive statistics for overall CSRD by industry type and of the independent samples t-tests of industry-type effects. Table 4.6 provides industry percentages based on the Industry Classification Benchmark (ICB) categories⁴⁵. The high-profile industries (49.5 percent) in the thesis sample are financials (16.9 percent), basic materials (16.1 percent), utilities (8.7 percent), and oil and gas (7.8 percent) companies. The low-profile industries (50.5 percent) are industrial (23.7 percent), consumer goods (11.1 percent), consumer services (5.0 percent), telecommunications (4.5 percent), technology (4.1 percent), and healthcare (2.0 percent) companies.

Table 4.6 Descriptive Statistics of Industry Classification

Industry Type	Industry	Frequency	%*
High Profile	1. Financials	78	16.9
	2. Basic Materials	74	16.1
	3. Utilities	40	8.7
	4. Oil and Gas	36	7.8
Sub-Total		228	49.5
Low Profile	5. Industrial	109	23.7
	6. Consumer Goods	51	11.1
	7. Consumer Services	23	5.0
	8. Telecommunications	21	4.6
	9. Technology	19	4.1
	10. Healthcare	9	2.0
Sub-Total		232	50.5

Total sample is 460 global firms across these various industries. Industry type is categorised into high-profile and low-profile industries.*The percentages are rounded up.

⁴⁵ Classification schema of companies into high-profile and low-profile are based on previous studies (see Chapter 3, Table 3.5 and Table 3.6 for details).

Industry types have been examined in many previous studies as a possible determinant of CSRD (Cowen, Ferreri and Parker 1987; Patten 1991; Roberts 1992; Hackston and Milne 1996; Williams 1997; Adams, Hill and Roberts 1998; Newson and Deegan 2002; Gao, Heravi and Xiao 2005; Ho and Taylor 2007; Reverte 2009). These studies often argue that high-profile industries positively disclose more CSRD than low-profile industries. High-profile industries, it is argued, have higher consumer visibility, a high level of political risk, and more concentrated, intense competition (Roberts 1992). The results of the independent samples t-tests (Table 4.7) show that the mean CSRD score for high-profile industries is 59.2 percent while the mean of low-profile industries is lower at 54.4 percent. There are statistically significant differences across high-profile and low-profile industries ($t = 2.133$; $p\text{-value} = 0.033$) with respect to the CSRD index.

Table 4.7 Independent Samples t-Tests of Industry-Type Effects

Industry	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means		Mean Difference
			F	Sig.	t	Sig.	
High Profile	228	59.2					
Low Profile	232	54.4					
Equal variances assumed			0.177	0.674	2.133	0.033**	0.0480
Equal variances not assumed					3.134	0.033**	0.0480

The independent samples t-tests are performed by comparing the mean CSRDs of high-profile and low-profile industries. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 confidence levels.

Consistent with legitimacy theory, this finding implies that firms in high-profile industries provide more sustainability information than firms in low-profile industries. Patten (1991) argues that the political visibility of a company is influenced by industry membership. More sensitive industries are more susceptible to scrutiny from stakeholder groups, since they are

more visible to external groups. Thus, this finding is in line with legitimacy theory and results of previous study.

4.8 Descriptive Statistics and Univariate Analysis for the Presence of Voluntary Assurance

As outlined in Table 4.8, of the 212 companies that had their sustainability reports voluntarily assured, 113 (53.3 percent) have their reports assured by the auditing profession.

Table 4.8 Descriptive Statistics of Voluntary Assurance Providers⁴⁶

Assurance Providers Type		Frequency	%
Auditing Profession	PWC	46	21.7
	Ernst & Young	27	12.7
	KPMG	23	10.9
	Deloitte & Touche	14	6.6
	Other	3	1.4
Sub-Total		113	53.3
Outside Auditing Profession	Other	57	26.9
	DNV	14	6.6
	ERM	14	6.6
	Net Balance	6	2.8
	Bureau Veritas	4	1.9
	Corporate Citizen	4	1.9
Sub-Total		99	46.7

Table 4.8 presents assurer data for the 212 companies that have some form of voluntary assurance. PWC = PricewaterhouseCoopers. KPMG = Klynveld Peat Marwick Goerdeller. DNV = Det Norske Veritas. ERM = Environmental Resources Management.

Table 4.9 presents the results of the independent samples t-tests of the presence of voluntary assurance statement. The presence of the extra voluntary assurance report variable shows that the mean of firms with sustainability reports assured is far higher (66.7 percent) than those not assured (48.4 percent). The statistical analysis indicate that there are statistically significant differences between assured and not assured

⁴⁶This thesis also conduct an additional analysis to test the extent of CSRD by companies whose sustainability reports are assured by the auditing profession and those that are assured by the non-auditing profession. The result of the independent samples-test shows that there is no significant differences in the extent of CSRD as a result of the assurance provider. Refer to Appendix B.

sustainability reports ($t = 8.729$; $p\text{-value} = 0.000$) in regards to sustainability communication (see Table 4.9). This result is consistent with Moroney, Windsor and Aw (2011), who find the level of environmental disclosure for assured companies to be higher (46.8 percent) than unassured companies (15.4 percent). This thesis finding suggests that firms with extra voluntary assurance statements on their sustainability reports are much more likely to disclose information about CSR activities.

Table 4.9 Independent Samples t-Tests of the Presence of a Voluntary Assurance Statement

Presence of Assurance	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means		Mean Difference
			F	Sig.	t	Sig.	
Assured	212	66.7					
Not Assured	248	48.4					
Equal variances assumed			1.886	0.170	8.729	0.000***	0.18322
Equal variances not assumed					8.694	0.000***	0.18322

The independent samples t-tests are performed by comparing the mean CSRDs of sustainability reports that are assured and not assured. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 confidence levels.

In line with legitimacy theory, this finding suggests that companies that undertake extra assurance practices may be doing so to enhance their credibility. Simnett, Vanstraelen and Chua (2009) conclude that companies with a higher need to increase credibility will be more likely to have their sustainability reports assured. This thesis univariate analysis finding supports such a conclusion. Sawani, Zain and Darus (2010) argue that a credibility motive is the main reason for such company communication. Other possible motives are companies' desire to respond in a more visible way to stakeholders' needs, and their seeking to improve internal and external reporting.

4.9 Descriptive Statistics and Univariate Analysis for the Presence of a CSR Committee

Corporate social responsibility (CSR) committees typically operate under one of two structures. First, CSR committees in some companies are a part of the board of directors. As such, they have a responsibility to report all CSR aspects to the board. Second some CSR committees operate under the executive of the company. Table 4.10 shows that in terms of a presence of the CSR committee, 72.7 percent of these committees are part of the board of directors, whilst 27.3 percent of such committees are responsible to the executive.

Table 4.10 Descriptive Statistics of the Presence of a CSR Committee

CSR Committee Structure ⁴⁷	Name of Committee	Frequency	%
Under Board of Directors	1. Environmental, Health and Safety	28	23.9
		18	15.4
	2. Sustainability	17	14.5
	3. Social Responsibility	10	8.6
	4. Other	7	6.0
	5. Governance and Sustainability	5	4.3
	6. Sustainability Development		
Sub-Total		85	72.7
Under Executive	1. Sustainability	17	14.5
	2. Other	6	5.1
	3. Social Responsibility	5	4.3
	4. Environmental, Health and Safety	4	3.4
Sub-Total		32	27.3

Only 117 companies in the sample that have CSR committees provided sufficient information to generate these categories.

Previous studies on the relationship between CSR and independent non-executive directors provide evidence that board independence fosters board effectiveness in the area of CSR (Said, Zainuddin and Haron 2009; Haniffa and Cooke 2005). The argument is that the existence of the

⁴⁷This thesis also conduct an additional analysis to test the extent of CSR of CSR committees formed under boards of directors and those formed under executives. The result of independent samples-test shows that there is no statistical difference in the extent of CSR between them. Refer to Appendix C.

committee will encourage companies to respond to more CSR matters, as most of the members of the committee are likely to be independent non-executive directors.

Table 4.11 Independent Samples t-Tests of the Presence of a CSR Committee

Presence of CSR Committee	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means		Mean Difference
			F	Sig.	t	Sig.	
Yes	117	61.8					
Not	343	55.1					
Equal variances assumed			0.282	0.596	2.594	0.010***	0.06681
Equal variances not assumed					2.570	0.010***	0.06681

The independent samples t-tests are performed by comparing the mean CSRDs of firms that have a CSR committee and those that don't have a CSR committee. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 confidence levels.

The results of the independent samples t-tests of the presence of a CSR committee (see Table 4.11) show that the mean of CSRD for companies which have a CSR committee is higher (61.8 percent) than for those that don't have a committee (55.1 percent). There are statistically significant differences between the two groups ($t = 2.594$; $p\text{-value} = 0.010$). This result is consistent with Michelon and Parbonetti (2012) and Cowen, Ferreri and Parker (1987), who find a positive relationship between the presence of such a committee and CSRD. Spitzeck (2009) argue that in CSRD index communications, firms with a CSR committee in place outperform those without such a committee.

The result indicates that the existence of such a committee operating under the board could be associated with a greater corporate propensity to make disclosures about CSR involvement (Cowen, Ferreri and Parker 1987). As argued by Adams (2002) an internal organisational factor such

as the presence of a corporate responsibility committee may affect the internal processes of CSR reporting or the attitudes which influence decision-making. As the purpose of such a committee is to represent the board and to assist the board in its oversight of health, safety, environmental, and community relate issues, their presence will likely encourage companies to disclose more CSR information.

4.10 Univariate Analysis for Jurisdictional Business Systems

As discussed in Section 4.1, the mean of the CSRD of companies from the emerging market is the highest (60.4 percent), followed by that of the communitarian (55.3 percent), and then Anglo-American companies (54.7 percent). Table 4.12, Panel A shows the results of the ANOVA tests.

Table 4.12 One-way ANOVA Tests of Jurisdictional Variable

Panel A: ANOVA Tests			
		F	p-value
Levene's Test of Equality of Error Variance		0.813	0.444
Tests of Between Subjects Effects		4.130	0.017**
Panel B: Tukey Post Hoc Tests			
Multiple Comparisons: (<i>Tukey HSD</i>)	Jurisdictional Business System	Mean Differences	p-value
Anglo-American	Communitarian	-0.05842	0.059*
	Emerging Market	-0.07877	0.026**
Communitarian	Anglo-American	0.05842	0.059*
	Emerging Market	-0.02035	0.767
Emerging Market	Anglo-American	0.07877	0.026**
	Communitarian	0.02035	0.767

Panel A shows one-way ANOVA tests performed by comparing the means of CSRDs for all three jurisdictions. Panel B shows the Tukey Post Hoc Tests, contrast the means of CSRDs of Anglo-American, communitarian, and emerging market jurisdictions. *, **, ***indicate significant at the 0.10, 0.05, and 0.01 confidence levels.

It can be seen that there is a significant statistical relationship between jurisdictional business systems and CSRD (F= 4.130 and p-value= 0.017).

This result is consistent with previous studies (see, for example, Van der Laan Smith, Adhikari and Tondkar 2005; Orij 2010; Adams, Hill and Roberts 1998). For example, Adams (2002) conclude that the country in which a company is located affects the nature and extent of disclosure. Similarly, Millar et al. (2005) and Eldomiaty and Choi (2006) suggest that jurisdictional business systems (such as institutional and cultural factors) influence levels of disclosure.

As shown in the *Tukey HSD test* (Table 4.12, Panel B), there are statistically significant differences in means between the level of CSRD communication for the Anglo-American and communitarian jurisdictions at the 10 percent level ($p\text{-value} = 0.059$) and between the Anglo-American and emerging market jurisdictions at 5 percent level ($p\text{-value} = 0.026$). The results clearly indicate that the CSRD of Anglo-American firms is lower than that of communitarian (mean differences=-0.05842) and emerging market firms (mean differences=-0.07877). Van der Laan Smith, Adhikari and Tondkar (2005) provide historical evidence that companies from communitarian countries have more social disclosure than Anglo-American companies. This thesis highlights the additional, and new finding that companies in emerging market countries also communicate more about CSR than those in Anglo-American countries. This is counter to earlier studies (see, for example, Orij 2010) and may reflect a growing desire on the part of emerging market companies to demonstrate legitimacy to global financial markets.

4.11 Univariate Analysis for Individual Indicators of CSRD

Table 4.13 presents the results of independent sample t-tests for individual indicators of CSRD. These tests are conducted to examine whether any statistical differences exist between the means of each individual indicator of CSRD across the categorical variables. Consistent with the previous findings discussed in Sections 4.8, 4.9, and 4.10, the results show that

there is a difference between high-profile and low-profile industry firms, those that have not and have assurance statements, and that have or do not have CSR committees. These findings pertain to the means of the individual indicators of CSRD.

Regarding economic themes, the findings in Table 4.13 show that:

- High-profile industries communicate more indicators than do low-profile companies in the following areas: financial implications and other risks, and opportunities for company activities due to climate change-EC2; significant financial assistance received from governments-EC4; range of ratios of standard entry-level of wage compare to local minimum wage at significant locations of operation-EC5; policies, practices, and proportion of spending on locally based supplier at significant locations of operation-EC6; procedures for local hiring and proportion of senior management hired from community at significant locations of operation-EC7; and indicator related to understanding and describing significant indirect economic impacts, including the extents of impacts-EC9. The results of the tests are statistically significant.
- High-profile industries also disclose more indicators than low-profile industries in the areas of: direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments-EC1; coverage of the companies defined benefit plan obligations-EC3; and development and impact of infrastructure investment and services provided primarily for public benefit through commercial, in-kind or *pro-bono* engagement-EC8. However, the results of the independent samples t-tests are statistically insignificant.

- Firms which have voluntary assurance statements in their sustainability reports disclosed more than those which have not for all economic indicators (EC2-EC9, except EC1). The results of the independent samples t-tests are statistically significant.
- Firms which have a CSR committee tend to release more EC5, EC6, EC7, and EC9 indicators in their sustainability reports than firms that do not have such a committee.

Table 4.13 Independent Samples t-Tests for Individual Indicators of CSRD

GRI Indicator	Industry Type			Presence of Assurance			Presence of CSR Committee		
	HP	LP	Sig.	Have	Not	Sig.	Have	Not	Sig.
EC1 – Direct economic value	89.0	84.0	.125	89.0	84.0	.138	88.0	85.0	.482
EC2 – Financial implication	76.0	65.0	.011**	82.0	61.0	.000***	71.0	70.0	.890
EC3 – Benefit plan obligations	61.0	56.0	.214	68.0	50.0	.000***	60.0	58.0	.732
EC4 – Financial assistance from government	51.0	43.0	.072*	62.0	34.0	.000***	53.0	45.0	.130
EC5 – Ratios of standard entry	42.0	32.0	.019**	51.0	25.0	.000***	47.0	34.0	.009***
EC6 – Policy, practices, proportion of spending	69.0	54.0	.001***	73.0	52.0	.000***	74.0	57.0	.001***
EC7 – Procedures for local hiring from community	65.0	51.0	.003***	73.0	45.0	.000***	67.0	55.0	.029**
EC8 – Development and impact investments	75.0	72.0	.362	83.0	66.0	.000***	79.0	72.0	.144
EC9 – Indirect and extent of economics impacts	56.0	44.0	.009***	56.0	44.0	.012**	56.0	48.0	.097*
EN1 – Materials used by weight or volume	69.7	58.6	.013***	75.9	54.4	.000***	73.5	61.2	.017**
EN2 – Materials used that they are recycled	61.7	51.1	.022**	64.1	50.0	.002***	59.8	55.3	.404
EN3 – Direct energy consumption	87.6	83.5	.210	93.4	89.6	.000***	89.7	84.2	.144
EN4 – Indirect energy consumption	77.4	80.4	.432	89.6	69.7	.000***	85.4	76.6	.044**
EN5 – Energy conservation and efficiency	70.6	72.0	.748	78.7	64.9	.001***	70.9	71.4	.920
EN6 – Renewable and reduction energy	68.0	72.0	.361	73.5	66.9	.121	69.2	70.2	.834
EN7 – Reduction indirect energy consumption	60.0	64.0	.378	65.0	59.2	.201	60.6	62.3	.743
EN8 – Total water withdrawal by source	85.5	76.0	.009***	89.1	73.7	.000***	89.7	77.8	.005***
EN9 – Water source affected by withdrawal water	40.0	26.6	.002***	38.6	29.0	.029**	41.8	30.6	.026**
EN10 – Volume of water recycled and reused	44.6	34.6	.028**	44.8	35.4	.042**	43.5	38.4	.331
EN11 – Land owned, leased and managed	53.6	41.3	.008***	60.3	36.6	.000***	61.5	42.8	.000***
EN12 – Impacts of activities on biodiversity	58.7	43.1	.001***	60.3	43.1	.000***	66.6	45.7	.000***
EN13 – Habitats protected and restored	48.0	36.0	.009***	47.6	37.5	.028**	59.8	36.1	.000***

Table 4.13 (continued)

GRI Indicator	Industry Type			Presence of Assurance			Presence of CSR Committee		
	HP	LP	Sig.	Have	Not	Sig.	Have	Not	Sig.
EN14 – Action and plans for managing biodiversity	51.9	43.1	.059*	55.1	41.1	.003***	63.2	42.2	.000***
EN15 – List species and national conservation	25.9	18.6	.061*	26.4	18.9	.056*	26.5	20.9	.218
EN16 – Direct and indirect greenhouse gas emissions	89.7	87.5	.451	95.2	83.0	.000***	90.6	88.0	.453
EN17 – Other indirect greenhouse gas emissions	60.4	62.6	.622	71.2	53.2	.000***	69.2	8.8	.047**
EN18 – Reduction greenhouse gas emissions	76.6	74.4	.555	79.7	71.7	.049**	80.3	73.7	.154
EN19 – Emissions of ozone-depleting	49.7	41.7	.085*	57.5	35.8	.000***	52.9	43.4	.074*
EN20 – NO and SO and other air emissions	67.6	52.0	.001***	69.3	52.0	.000***	65.8	58.0	.138
EN21 – Water discharge by quality and destinations	63.4	49.3	.002***	66.0	48.3	.000***	61.5	54.8	.206
EN22 – Weight of waste by type and disposal method	80.0	79.5	.906	87.2	73.3	.000***	83.7	78.4	.216
EN23 – Total number and volume of spills	60.8	55.1	.213	67.9	49.6	.000***	66.6	55.1	.029**
EN24 – Transported or treated waste	33.1	21.3	.004***	34.9	20.9	.001***	29.9	26.5	.480
EN25 – Biodiversity value of water bodies	28.5	19.1	.018**	33.0	16.1	.000***	25.6	23.3	.613
EN26 – Mitigate environmental impacts	82.9	80.4	.483	87.7	76.6	.002***	78.6	82.8	.315
EN27 – Products sold	37.4	41.3	.395	48.5	31.4	.000***	47.8	36.4	.029**
EN28 – Fines and non-monetary sanctions	61.2	62.2	.835	71.2	53.6	.000***	71.7	58.3	.009***
EN29 – Environmental impacts of transporting	45.5	44.8	.890	51.8	39.5	.008***	46.1	44.9	.814
EN30 – Total environmental protection expenditure	49.7	37.3	.007***	51.4	37.1	.002***	53.8	40.2	.010**
LA1 – Total workforce	92.3	86.6	.047**	93.8	85.8	.005***	94.0	88.0	.068*
LA2 – Total and rate of employee turnover	78.7	68.0	.009***	87.2	61.6	.000***	74.3	73.1	.803
LA3 – Benefit provided for full employees	59.1	50.6	.068*	65.0	46.3	.000***	59.8	53.3	.225
LA4 – Employees covered	76.1	64.4	.006***	82.5	60.0	.000***	76.9	68.2	.075*
LA5 – Minimum notice period	56.6	46.2	.026**	70.2	35.4	.000***	50.4	51.9	.784
LA6 – Management- worker health and safety	51.4	43.1	.072*	57.5	38.7	.000***	52.9	45.4	.161
LA7 – Rates of injury, diseases, lost days	88.9	88.0	.754	93.4	84.2	.002***	89.7	88.0	.621
LA8 – Education, training and counselling	82.1	69.7	.002***	83.9	69.3	.000***	72.6	77.2	.314
LA9 – Health and safety topics	45.5	34.2	.013**	49.0	32.2	.000***	37.6	40.8	.542
LA10 – Average hours of training per year	78.3	72.4	.146	86.3	66.1	.000***	76.9	74.9	.666

Table 4.13 (continued)

GRI Indicator	Industry Type			Presence of Assurance			Presence of CSR Committee		
	HP	LP	Sig.	Have	Not	Sig.	Have	Not	Sig.
LA11 – Program for skills and lifelong learning	73.1	68.4	.264	72.6	69.3	.440	73.5	69.9	.469
LA12 – Employees performance reviews	62.5	65.7	.472	70.2	58.8	.011**	61.5	65.0	.499
LA13 – Composition of governance bodies	80.0	73.7	.114	82.5	72.1	.008***	79.4	76.0	.453
LA14 – Ratio of basic salary of men to women	56.6	44.0	.007***	66.0	37.1	.000***	52.1	49.8	.671
HR1 – Investment agreements	49.3	38.2	.016**	64.6	26.2	.000***	51.2	41.4	.063*
HR2 – Screening on human rights and actions taken	57.8	55.5	.617	73.5	42.3	.000***	63.2	54.5	.100
HR3 – Policy and procedures human rights aspects	40.4	39.5	.849	52.3	29.4	.000***	45.3	38.1	.176
HR4 – Incidents of discriminations and actions taken	62.5	49.7	.006***	71.7	43.1	.000***	64.1	53.6	.049**
HR5 – Freedom of association, collective bargaining	61.7	54.6	.127	71.7	46.7	.000***	65.8	55.6	.055*
HR6 – Child labour	66.8	60.8	.187	75.0	54.4	.000***	64.1	63.8	.961
HR7 – Forced and compulsory labour	65.5	58.2	.107	73.5	52.0	.000***	62.3	61.8	.911
HR8 - Security practices	37.0	24.4	.003***	41.0	22.1	.000***	39.3	27.9	.022**
HR9 – Indigenous rights	38.3	20.0	.000***	38.6	21.3	.000***	43.5	24.4	.000***
SO1 – Community	81.7	60.4	.000***	80.1	63.7	.000***	81.2	67.9	.006***
SO2 – Corruption	62.1	55.1	.127	74.0	45.5	.000***	60.6	58.0	.614
SO3 – Anti-corruption policies and procedures	72.3	66.6	.187	79.7	60.8	.000***	70.9	69.1	.709
SO4 – Actions taken in response corruption	61.7	53.3	.070*	70.7	46.3	.000***	63.2	55.6	.154
SO5 – Public policy development	69.7	61.3	.056*	78.3	54.8	.000***	67.5	65.0	.623
SO6 – Financial contributions to political parties	49.7	41.7	.085*	53.7	39.1	.002***	56.4	42.2	.008***
SO7 – Anti competitive behaviour	42.5	31.1	.011**	48.5	27.0	.000***	44.4	34.4	.052*
SO8 – Fines and sanctions for non compliance	56.1	44.8	.016**	65.5	37.9	.000***	63.2	46.3	.002***
PR1 – Health and safety products & services	61.7	67.5	.190	71.2	58.8	.006***	67.5	63.5	.440
PR2 – Incidents of non-compliance	37.4	30.2	.102	42.4	26.6	.000***	41.0	31.4	.060*
PR3 – Type of product and service information	61.7	56.0	.215	70.7	48.7	.000***	61.5	58.0	.505
PR4 – Product and service labelling	38.3	26.2	.006***	44.3	22.1	.000***	39.3	30.0	.064*
PR5 – Customer satisfaction survey	57.8	59.1	.788	67.4	50.8	.000***	54.7	59.7	.338
PR6 – Marketing communication program	50.2	59.5	.044**	69.3	42.3	.000***	52.9	55.3	.653

Table 4.13 (continued)

GRI Indicator	Industry Type			Presence of Assurance			Presence of CSR Committee		
	HP	LP	Sig.	Have	Not	Sig.	Have	Not	Sig.
PR7 – Advertising, promotion and sponsorship	35.3	29.7	.206	43.4	23.3	.000***	39.3	30.3	.073*
PR8 – Customer privacy	39.5	28.8	.016**	47.1	23.3	.000***	35.9	33.8	.684
PR9 – Compliance	48.0	40.0	.081*	60.8	29.8	.000***	51.2	41.6	.071*

The independent samples t-tests are performed by comparing the mean CSRD of high-profile (HP) and low-profile (LP) industries, that have and do not have a voluntary assurance statement, companies with and without a CSR committee. CSRD = corporate social responsibility disclosure. EC = economic. EN = environmental. LA = labour practices and decent work. HR = human rights. SO = society. PR = product responsibility. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 confidence levels.

With regard to environmental themes, the results of the independent samples t-tests show that:

- The majority of high-profile industries disclosed more than low-profile industries for indicators related to materials used by weight or volume-EN1; percentage of materials used that are recycled input materials-EN2; total water withdrawal by sources-EN8; water sources significantly affected by withdrawal of water-EN9; percentage and total of water recycled and reused-EN10; location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas-EN11; description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas-EN12; habitats protected and restored-EN13; strategies and current actions and future plans for managing impacts on biodiversity-EN14; number of IUCN red list species and national conservation lists species with habitats in areas affected by operations, by level of extinction risk-EN15; emissions of ozone-depleting substances by weight-EN19; NO, SO and other significant air emissions by type and weight-EN20; total water discharged by quality and destination-EN21; weight of transported, imported or treated waste deemed hazardous, under the terms of the Basel Convention Annex I, II, III, and IV, and percentage of transported waste shipped internationally-EN24; identify size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting firms's discharge of water and run-off-EN25; and total environmental protection expenditures and investments by type-EN30. These results are statistically significant.
- Firms that are sustainability assured reveal more information than those not assured. Results are statistically significant for all environmental indicators, except for information concerning initiative

to provide energy-efficient or renewable energy-based products and services and reduction in energy requirements as a results of these initiatives-EN6 and initiatives to reduce indirect energy consumption and reductions achieved-EN7.

- The means of environmental indicators (EN1; EN4 = indirect energy consumption by primary energy source; EN8; EN9; EN11; EN12; EN13; EN14 = indirect greenhouse gas emissions; EN17 = other relevant indirect greenhouse gas emissions by weight; EN19; EN23 = total number and volume of significant spills; EN27 = percentage of product sold; EN28 = monetary value of significant and total number of non-monetary sanctions for non-compliance with environmental laws and regulations; and EN30 are higher for firms with have a CSR committee than those without. These results are statistically significant.

Pertaining to the labour practices themes, the findings in Table 4.13 reveal that:

- Firms in high-profile industries tend to disclose more than those in low-profile industries for the indicators for total workforce by employment type, employment contract and region-LA1; total number and rate of employee turnover by age, group, gender and region-LA2; benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations-LA3; percentage of employees covered by collective bargaining agreement-LA4; minimum notice periods regarding significant operational changes, including whether it is specified in collective agreements-LA5; percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on occupational health and safety programs-LA6; education, training, counselling, prevention and risk-control programs in place to assist workforce members, their

families or community members regarding serious diseases-LA8; health and safety topics covered in formal agreements with trade unions-LA9; and ratio basic salary of men to women employees category-LA14. These results are statistically significant.

- Firms which have a voluntary assurance statement communicate more about all indicators, except for topics related to programs for skills and lifelong learning that support the continued employability of employees and assist them in managing career endings-LA11. This is in contrast to firms without an assurance statement. These results are statistically significant.
- Surprisingly, only two indicators (LA1 and LA4) of labour practices and decent work show statistically significant differences (at the 10 percent level) between firms which have a CSR committee and those don't have.

Relating to human rights themes, the results of independent samples t-tests highlight that:

- Firms in high-profile industries disclose more than those from low-profile industries for the following indicators: percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening-HR1; the total number of incidents of discriminations and actions taken-HR4; the percentage of security personal trained in the organisation's policies or procedures concerning aspects of human rights that are relevant to operations-HR8; and the total number of incidents of violations involving rights of indigenous people and actions taken-HR9. The results are statistically significant.
- The means of all human rights indicators are higher, at a statistically significant level for companies that have a voluntary assurance statement than for those don't have.

- Firms which have a CSR committee disclose more and at a statistically significant level about the percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken-HR2; HR4; HR8; and HR9 than do firms which do not have a CSR committee.

With regard to themes that relate to society, the findings of the independent samples t-test provided in Table 4.13 show:

- High-profile industry firms tend to be more likely than low-profile industry firms to disclose indicators relating to nature, scope, and effectiveness of any programs and practices that assess and manage the impact of operations on communities, including entering, operating and existing-SO1; actions taken in response corruption-SO4; public policy positions and participation in public policy development and lobbying-SO5; the total value of financial contributions to political parties, politicians, and related institutions by country-SO6; the total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes-SO7; and monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations-SO8. The results are statistically significant.
- The presence of a voluntary assurance statement has a significant influence on the means of indicators that relate to society. Companies that have their sustainability reports assured have higher means at statistically significant level, than those that have not been assured. This is the case for all society indicators.
- Indicator SO1, SO6, SO7, and SO8 are revealed more at statistically significant level by companies which have a CSR committee than by those that do not.

Concerning product responsibility indicators, the findings show that:

- Information about indicators related to the total number of incidents of non-compliance with regulations and voluntary codes concerning products and services information and labelling, by type of outcomes-PR4; program for adherence to laws, standards and voluntary codes relating to marketing communication, including advertising, promotion and sponsorship by type of outcomes-PR6; total number of substantiated complaints regarding breaches of customer privacy and losses of customer data-PR8; and monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of the products and services-PR9 are disclosed more at statistically significant levels by high-profile industry firms than by those in low-profile industries..
- The means of all product responsibility indicators for firms with assurance statements are higher than those of firms without assurance statements at statistically significant levels.
- The total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services by type of outcomes-PR2; PR4; PR7, and PR9 are disclosed more at statistically significant levels by companies which have a CSR committee than those don't have such a committee.

4.12 Summary

This chapter reports the research findings of the descriptive statistics and univariate analysis. The results of the descriptive statistics show that the level of global corporate social responsibility disclosure is moderately high, averaging 56.8 percent. Labour practices (66.4 percent) is the theme most communicated by companies. The results of independent samples t-tests indicate that the levels of CSRD show statistically significant differences in the following case: between high-and low-profile industries, between

companies that do and do not have a voluntary assurance statement, and those that have and do not have a CSR committee. The ANOVA tests show that there is a significant relationship between jurisdictional business systems and corporate social responsibility disclosure (CSR), with emerging market companies having significantly higher levels of communication than Anglo-American companies.

The next chapter examines factors that potentially influence the extent of CSR. It also tests the assumptions of regression analysis. Lastly, it ends with a sensitivity analysis for further insights.

CHAPTER FIVE

MULTIVARIATE ANALYSIS

5.0 Introduction

This chapter presents the results of the multivariate analysis. It begins by highlighting the findings of the descriptive statistics for independent and control variables in Section 5.1. Sections 5.2 and 5.3 then provide the results of outlier detection and an explanation of the assumptions of the statistical tests. The results of hypotheses testing via regression analysis and a discussion of these results are presented in sections 5.4 and 5.5. Section 5.6 shows the findings of the sensitivity analysis (i.e. alternative measures). Section 5.7 summarizes the key findings of the chapter.

5.1 Descriptive Statistics for Model Variables

The descriptive statistics are shown in Table 5.1, which provides an overview of the continuous variables. The results show that the average company included in this thesis is large in size⁴⁸. The mean (median) number of employees is 41,607 (16,197) and the total company assets are 71,217.5 (9,758.7) million US dollars. The firm size ranged widely, from 53 to 539,200 employees and total assets of 13.1 to 2,364,452 million USD. The results show that there is a large gap between the mean and median figures, indicating that firm size contains some extreme values and is heavily skewed.

With regard to the control variables, Table 5.1 shows that the average (median) leverage ratio of the sample firms is 62.7 percent (62.1 percent). This value indicates that the leverage of the sample firms is relatively high.

⁴⁸ Of 460 companies in this thesis sample, 248 or 53.9 percentage large companies listed on the 2009 Forbes Global 2000. Further, of these 460 firms, 113 firms or 24.5 percentage among the world's largest corporations, as listed on The Fortune Global 500 in 2009. Overall, the thesis's sample clearly included many of the world's most prominent companies.

The high leverage ratio may indicate that creditors represent a key stakeholders group.

Table 5.1 Descriptive Statistics for Continuous Variables⁴⁹

Variables	Mean	Median	Std Dev	Minimum	Maximum
Firm size:					
<i>Employees</i>	41,607	16,197	71,549	53 ⁵⁰	539,200 ⁵⁴
<i>Log. employees</i>	4.1	4.2	0.6	1.7	5.7
<i>Total assets</i>	71,217.5	9,758.7	234,317.1	13.1 ⁵¹	2,364,452.0 ⁵⁵
<i>Log T. assets</i>	4.0	3.9	0.8	1.1	6.3
Leverage	62.7	62.1	21.4	0.4 ⁵²	104.0 ⁵⁶
Profitability (ROA)	3.5	2.8	6.4	-60.8 ⁵³	34.2 ⁵⁷

The descriptive statistics in Table 5.1 are expressed in number (for employees), millions USD (for total assets), and percentage (for leverage and ROA). Log=logarithma. Log T. Assets=logarithma total assets. The firm size variables are measured by the number of employees (main proxy) and the total assets (additional proxy). Profitability is measured by return on asset(ROA), net profit (loss)/total assets. Leverage=total liabilities/total assets.

The mean of ROA suggests that the financial performance of the companies is relatively low, with a minimum value ROA of -60.8 percent and overall mean (median) of 3.5 percent (2.8 percent). The relatively low

⁴⁹Some number/ratios of these variables are unusual. Therefore, they are all double checked and found to be accurate. The following footnotes highlight some of the extreme numbers.

⁵⁰The firm which had the lowest number of employees is Australian Ethical Investment, Australia. As reported at 30 June 2009, they had 51 permanent staff and 2 temporary staff (Australian Ethical Investment Sustainability Reports 2009, 5).

⁵¹Reported on Australian Ethical Investment's balance sheet at 30 June 2009 (Australian Ethical Investment Annual Report 2009, 27).

⁵²At 31 December 2009 Nykredit, Denmark reported that their total assets are 889.59 and total liabilities 3.56 million DKK (Nykredit Annual Report 2009).

⁵³At 31 December 2009 the income statement of Q Cells Germany showed that they have a negative net income (EUR 1,356.20 millions) (Q Cells Annual Report 2009).

⁵⁴Petro China reported that of 539,200 employees, 61 percent are operating staff, 16 percent are technicians, 12 percent are management staff, and the rest financial, sales, and other staff (Petro China Sustainability Report 2009).

⁵⁵As reported on the balance sheet of HSBC Holdings, UK at 31 December 2009 (HSBC Annual Report 2009, 355).

⁵⁶Reported on the balance sheet at 31 December 2009 Ford Motor US had total assets of 194,850 (reclassified to be 192,040) and total liabilities of 201,365 (reclassified to be 199.860) million USD (Ford Motor Annual Report 2009).

⁵⁷At 31 December 2009, Bristol Myers Squibb US had net income USD of 10,612 million (Bristol Myers Squibb Annual Report 2009, 39).

ROA ratio may be a reflection of global economic conditions, which companies around the world experienced financial hardship during the global financial crisis of 2007 to 2009.

Figure 5.1 displays the histogram for both number of employees and total assets. Given the extreme skewness, the logarithmic transformation is employed to reduce the influence of very large companies on the regression results (Gray et al. 2001). The right hand histograms in Figure 5.1 reveal a far more normal distribution of number after the log transformation is used.

**Figure 5.1 Histogram of Firm Size
(Number of Employees and Total Assets)**

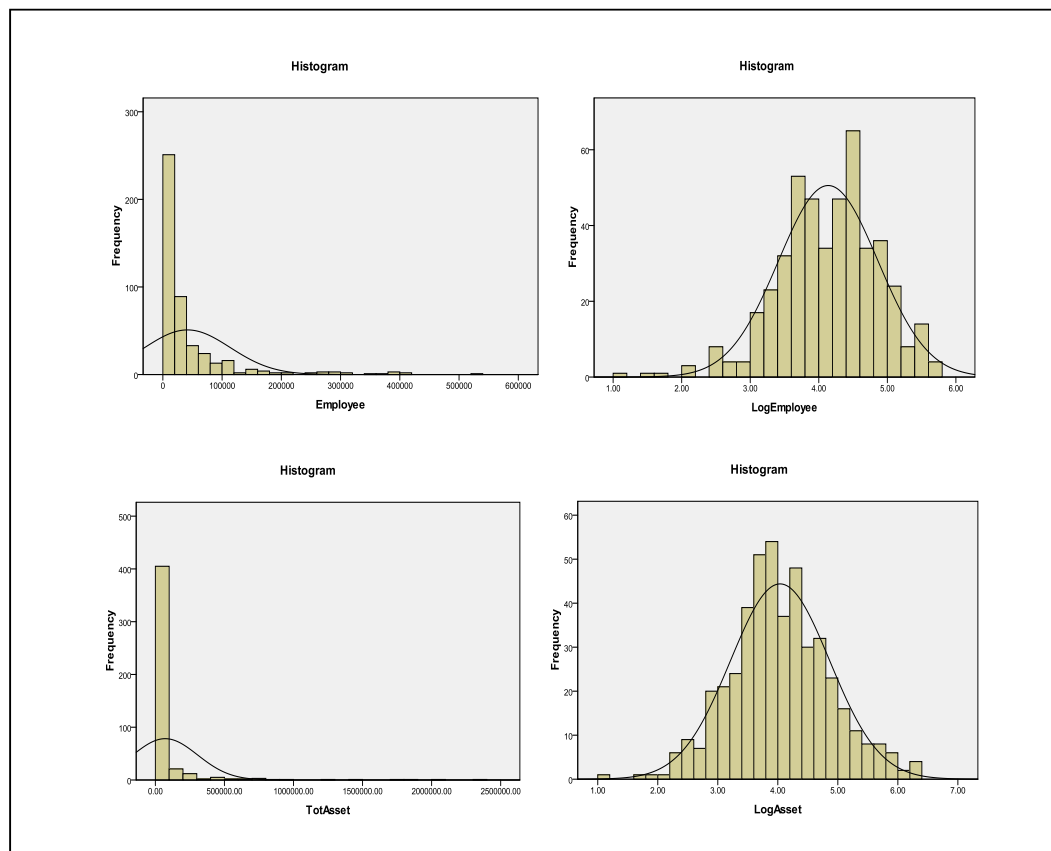


Table 5.2 shows the descriptive statistics for the categorical variables. Concerning the industry type⁵⁸, 228 (49.6 percent) of the total 460 sample companies are categorised as high-profile and 232 (50.4 percent) as low-profile industry firms.

Table 5.2 Descriptive Statistics for Categorical Variables

Variables	Frequency	%
Industry Type:		
High Profile	228	49.6
Low Profile	232	50.4
Presence of Voluntary Assurance Statement:		
Assured	212	46.1
Not Assured	248	53.9
Presence of CSR Committee:		
Yes-have CSR Committee	117	25.4
No-CSR Committee	343	74.6
Jurisdictional Business Systems:		
Anglo-American	162	35.2
Communitarian	195	42.4
Emerging-Market	103	22.4
N = 460		

The descriptive statistics reported in Table 5.2 are expressed as numbers and percentages. CSR=corporate social responsibility. The industry type, the presence of a voluntary assurance statement, the presence of a CSR committee, and jurisdictional business systems variables are measured by dummy variable.

The KPMG survey (2008) note that 139 (55.6 percent) of 250 companies from the Fortune Global 500 that published their sustainability reports are from high-profile industries⁵⁹. Kolk and Perego (2010) also note that, for the years 1999, 2002, and 2005, 298 (46.8 percent) of the 636 companies listed on the Fortune Global 250 that produced sustainability reports are

⁵⁸In this thesis, oil and gas, basic materials, financials, and utilities industries are classified as high-profile industries. While industrials, consumer goods, consumer services, telecommunications, technology and healthcare are categorised as low-profile industries (see, for example, Roberts 1992; Newson and Deegan 2002; Reverte 2009).

⁵⁹ The breakdown of the 139 G250 companies is 78 companies from finance, insurance and securities; 25 companies from oil and gas; 18 companies from automotive; 12 companies from utilities; 4 companies from chemicals, and 2 companies from the mining sector.

from high-profile industries⁶⁰. These studies indicate that firms in high-profile industries are more likely to produce sustainability reports than those in low-profile industries.

In this thesis, of the 460 sustainability reports sampled, 212 (46.1 percent) that have been voluntary assured by an assurance provider. KPMG (2008) reported that of G250 (40.0 percent), 100 companies utilised formal assurance in their sustainability reports. Simnett, Vanstraelen and Chua (2009) note in their study that of 2,113 sustainability reports, 655 (31.0 percent) contained independent assurance reports. Kolk and Perego (2010) identify 104 firms of the Fortune Global 250 firms that have an independent voluntary assurance statement in their sustainability reports. This may indicate trend to include a voluntary assurance statements in sustainability reports (KPMG 2008).

The majority (74.6 percent) of sample companies do not have a CSR committee. Only 117 companies (25.4 percent) have a CSR committee. The KPMG survey in 2008 noted that only 13.0 percent of G250 companies have CSR committees. Michelin and Parbonetti (2012) calculate that of 114 companies from ten countries, only 20.2 percent have established CSR committees. The low percentage of companies that have a CSR committee may indicate that the presence of such a committee as a governance mechanism is relatively new (Michelon and Parbonetti 2012).

With respect to the jurisdictional variable, of the 460 total sample firms from 44 countries, 162 firms (35.2 percent) are classified as being within Anglo-American⁶¹ countries, 195 firms (42.4 percent) in communitarian⁶²

⁶⁰ 298 companies are from the oil, chemicals, utilities or bank and insurance sectors.

⁶¹ Australia, Canada, Ireland, New Zealand, the UK, the US, and Singapore are classified as Anglo-American (see, for example, Simnett, Vanstraelen and Chua 2009; Orij 2010).

countries, and 103 firms (22.4 percent) in emerging market⁶³ countries. The results show that a greater proportion of communitarian companies are identified as CSR reporters in 2009 (see Table 5.2). This proportion is consistent with the findings of the KPMG survey in 2008 which find that companies from Spain, Portugal, the Netherlands, France, Sweden and Italy have produced more than 50 percent of the stand-alone sustainability reports in 2008⁶⁴.

5.2 Outlier Tests

Multiple regression analyses are used as the primary hypotheses testing techniques in this thesis, a key objective being to remove any true outliers that would fundamentally affect the findings. This thesis uses Mahalanobis and Cooke's Distance to detect multivariate outliers. Hair et al. (2009) define outliers as observations with a unique combination of characteristics identifiable as distinctly different from the other observations. Extreme cases, for example, have considerable impact on the regression solution and should be deleted or modified to reduce their influence (Coakes 2009).

Mahalanobis' Distance is a measure of the distance in multidimensional space of each observation from the mean centre of the observations (Hair et al. 2009). Mahalanobis' Distance scores are calculated for this sample. With eight degrees of freedom and .001 level of confidence, the maximum

⁶²Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Japan, Norway, Portugal, South Korea, Spain, Sweden, Switzerland, and the Netherlands are classified as countries having communitarian business systems. (see, for example, Simnett, Vanstraelen and Chua 2009; Orij 2010).

⁶³The emerging market countries identified are Argentina, Brazil, China, Chile, Colombia, Croatia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Nigeria, the Philippines, Russia, South Africa, Sri Lanka, Taiwan, Thailand, Turkey, and the United Arab Emirates (see, for example, Williams 1999; Millar et al. 2005; Simnett, Vanstraelen and Chua 2009; Orij 2010).

⁶⁴KPMG (2008) notes that companies from Japan, UK, and US have the highest number of stand-alone sustainability reports. However, it is important to note that their sample consists of all company types in the N100 (e.g. public, private, and subsidiary companies).

Mahalanobis' scores are 26.1. Three potential outliers are noted⁶⁵. The accepted cut-off values of the Cook's Distance score⁶⁶ are below 1 (Williams 1997), and no potential outliers are detected by the Cook's Distance scores (see Appendix D).

Table 5.3 Descriptive Statistics for Mahalanobis Scores

	Mean	Std Dev	Minimum	Maximum
Mahalanobis Scores (n = 460)	7.9	5.9	3.3	109.5
Mahalanobis Score (n = 457)	7.7	3.1	3.3	25.3

The table shows the descriptive statistics of the Mahalanobis' scores before and after removing the outliers. Std Dev=standard deviation.

Table 5.3 shows the descriptive statistics of the Mahalanobis scores for the full sample before (n=460) and after removing the outliers (n=457). To test the influence of outliers, additional multiple regressions are carried out. Based on the results of these tests, it is concluded that there is no significant statistical difference in the regression models with and without outliers (see Appendix E). Thus, for the main analysis, the potential outliers are retained and the full sample is used as the main regression model.

5.3 Assumptions of Regression Analysis

There are four key assumptions underlying regression analysis, namely normality, linearity, multicollinearity, and homoscedascity (Tabachnick and Fidell 2007; Coakes 2009). Hair et al. (2009, 68) argue that the statistical assumptions need to be tested because of the complexity of the relationships. Thus, testing these assumptions should occur in the initial phases of the regression (Hair et al. 2009).

⁶⁵ See Appendix D for details. Three observations exceed 26.1. These are case numbers 17 (OZ Minerals-Australia (29), 140 (Q Cells-Germany) (109.6), and 400 Bristol-Meyer Squibb-USA) (26.6).

⁶⁶ Details about Mahalanobis' and Cook's Distance scores are provided in Appendix D.

5.3.1 Normality

One of the assumptions of multiple regressions is that the residuals (errors) should be normally distributed (Gujarati 2004). The assumption of multivariate normality is made as part of the derivation of a variety of significance tests (Tabachnick and Fidell 2007). This assumption is required for assurance that the p-values for t- and F-tests are valid. Table 5.4 shows the results of the normality tests for residuals. It can be seen that the value of Kolmogorov-Smirnov is .097 at the p-value .331. As the p-value is more than .05, it can be concluded that the residual is normally distributed (Tabachnick and Fidell 2007).

Table 5.4 Normality Test for Residuals Distribution

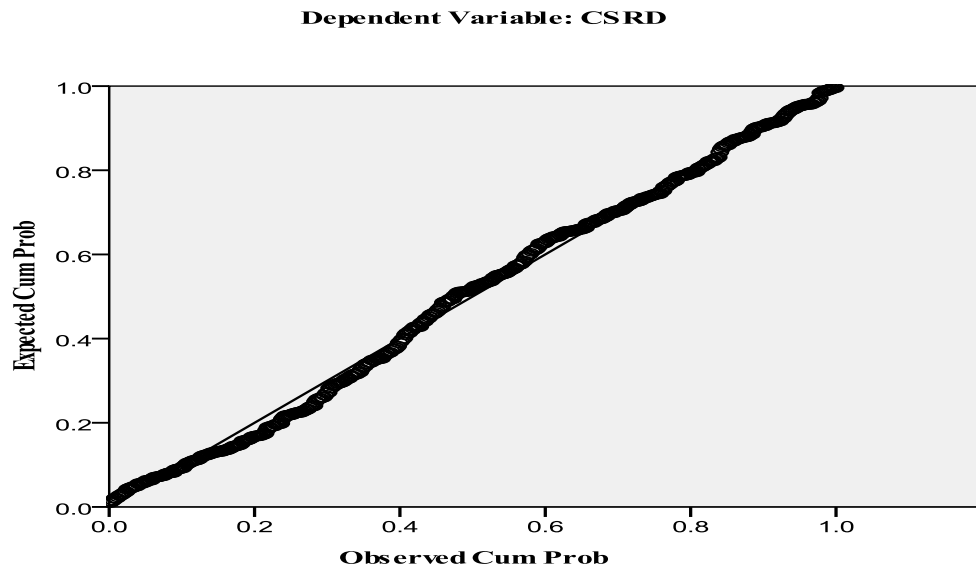
N = 460	Unstandardized Residual
Kolmogorov-Smirnov Z	.947
Asymp Sig (2-tailed)	.331

5.3.2 Linearity

The second assumption underlying regression analysis is that the residuals have a reasonably linear relationship with the predicted dependent variable and that the residuals for the predicted dependent variable score are the same for all the predicted scores (Tabachnick and Fidell 2007; Hair et al. 2009). Linearity is important because Pearson's r only captures the linear relationships among variables; if there are substantial nonlinear relationships among variables, they are ignored (Tabachnick and Fidell 2007). It can be seen from Figure 5.2 that there is a clear relationship between the residuals and the predicted values, consistent with the assumption of linearity. Thus, the model meets the assumption of linearity.

Figure 5.2 Linearity

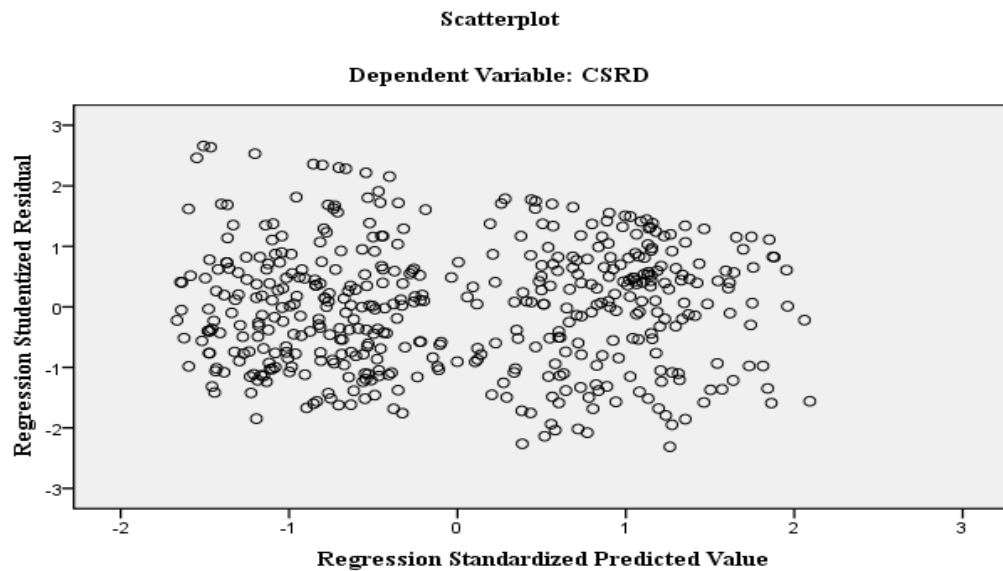
Normal P-P Plot of Regression Standardized Residual



5.3.3 Homoscedasticity

Homoscedasticity is an assumption related to dependency relationships between variables (Hair et al. 2009). Homoscedastic means that the variability of one continuous variable is roughly the same as the values of other continuous variables (Tabachnick and Fidell 2007, p. 85). There are many ways to test homoscedasticity; scatter plots and Glejser Tests are two of these (Ghozali 2007; Coakes 2009). Figure 5.3 indicates that there is no specific pattern in the scatter plots. Thus, the regression model meets the assumption of homoscedascity.

Figure 5.3 Scatter Plots of the Residuals of CSRD



This result is further supported by the Glesjer Test, the results of which is displayed in Table 5.5. The test suggests that the regression model does not contain heteroscedasticity if there is no significant relationship between the absolute values of the residuals and the independent variables. It can be seen that the level of significance for all the independent variables (except jurisdiction) is higher than .05. The significance level of the jurisdiction variable indicates that there is a possible heteroscedasticity problem. However, this issue is not considered to be a serious threat affecting the overall conclusion of this study. Moreover, Tabachnick and Fidell (2007) argue that heteroscedasticity does not undermine the regression analysis, as long as the linear relationship between variables is captured by the analysis⁶⁷.

⁶⁷ This thesis has met the linearity assumption (see Section 5.3.2).

Table 5.5 Glesjer Tests

Independent Variables	t	Significance
Firm size	-.293	.769
Industry type	-.706	.480
Presence of assurance	1.300	.194
Jurisdictional business systems	-2.047	.041
Presence of CSR committee	-.527	.598
Leverage	.984	.326
Profitability (ROA)	.345	.730
N=460		

The dependent variable of this regression is absolute residuals. Firm size is measured by number of employees. Log=logarithm. CSR=corporate social responsibility. ROA=return on asset.

5.3.4 Multicollinearity

Multicollinearity refers to high correlations among the independent variables (Coakes 2009). The tolerance value and its inverse—the variance inflation factor (VIF)—and correlation are common measures for assessing multicollinearity (Hair et al. 2009). Hair et al. (2009) further argue that a common cut-off threshold is a tolerance value of .10, which corresponds to a VIF value above 10. The results of the multicollinearity tests are provided in Table 5.6.

Table 5.6 Multicollinearity Analysis

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
Firm size	.902	1.109
Industry type	.918	1.089
Presence of assurance statement	.967	1.034
Jurisdictional business systems	.972	1.029
Presence of CSR committee	.932	1.073
Leverage	.809	1.237
Profitability (ROA)	.901	1.110
N=460		

The dependent variable is CSR. CSR=corporate social responsibility disclosure. Firm size= number of employees. ROA=return on assets.

It can be seen that the tolerance values for all variables are far above .10 and all the VIF values are below 10. Based on these results, it can be concluded that there is no multicollinearity problem in the regression model.

Table 5.7 shows the correlations between variables. The results show that the directional correlation amongst dependent and independent variables all are positive. As the correlation value is below the critical limit of 0.80 (Hair et al. 2009) it is suggested that there is not a multicollinearity problem between predictor variables.

Table 5.7 Pearson Correlation

	1	2	3	4	5	6	7	8
1. CSRD	1							
2. Firm size	.021	1						
3. Industry type	.150**	-.093*	1					
4. Assurance	.378**	.001	.076	1				
5. Jurisdictional	.128**	-.015	.042	.106*	1			
6. CSR	.120**	.024	.192**	.031	-.107*	1		
7. Leverage	.094*	.157**	.135**	.114*	.035	-.087	1	
8. ROA	.002	.059	-.071	.031	.038	-.044	-.268**	1

Pearson correlation matrix shows the correlation coefficient for all independent and control variables and the dependent variable. The dependent variable is CSRD. CSRD=corporate social responsibility disclosure. Firm size= number of employees. Assurance=the presence of voluntary assurance statement. Jurisdictional=jurisdictional business systems. CSR=the presence of a CSR (corporate social responsibility) committee. ROA=return on assets. *, **, ***indicate significance at the 0.10, 0.05, and 0.01 confidence level.

Based on the testings in sections 5.2 and 5.3, it is concluded that the key statistical assumptions for regression modelling testing are met. Therefore, multiple regression analyses are used as the primary statistical tests for testing the hypotheses of this thesis.

5.4 Multiple Regressions of CSRD

Table 5.8 details the results of the main multiple regressions performed using corporate social responsibility disclosure (CSRD) as the dependent variable. The results of these multiple regressions shows the model fits and statistically significant, with F-statistic = 12.314 and p-value = 0.000. The regression has an adjusted R² of 16.5 percent, which is similar to past disclosure studies⁶⁸.

Table 5.8 Multiple Regressions Results: CSRD

Independent Variables		Predicted Sign	Coefficient	t-value	p-value
Constant			.358	5.433	.000***
Firm size (log employees)	H1	+	.007	.466	.641
Industry type	H2	+	.046	2.147	.032**
Presence of assurance	H3	+	.170	8.043	.000***
Communitarian	H4	±	.042	1.708	.088*
Emerging market	H4	±	.068	2.402	.017**
Presence of CSR committee	H5	+	.060	2.441	.015**
Control Variables					
Leverage		-	.047	.867	.387
Profitability (ROA)		+	.046	.270	.787
Adjusted R ²		.165			
F-statistic		12.314			
p-value		.000			
N		460			

The table shows the regression results for the entire sample (n=460). CSRD=corporate social responsibility is the dependent variable. Note:the Anglo-American jurisdiction is excluded from the model.The number of categories of jurisdictionwas3 (n = 3). The regression formula for dummy variable is n – 1; hence, only 2 dummy variables areinserted in regression model. The excluded variable is randomly chosen (statistics softwares will exclude one variable automatically once all dummy variables are entered into the regression equation).*, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

⁶⁸Previous cross-country studies have yielded a wide range of adjusted R² variations. For example, Orij (2010) research on the CSRD of 600 large companies from 22 countries, examining national culture reports an explanatory power of 7.5 percent. Using the Dow Jones Global Index (DJGI), Lopez, Garcia and Rodriguez (2007) examine the relationship between specific accounting indicators and CSR. They report an adjusted R² value of 32.8 percent.

First, the findings in Table 5.8 show that firm size (measured by the number of employees) is positively associated with corporate social responsibility disclosure. However, the p-value (0.641) is statistically insignificant. The insignificant result with respect to the relationship between firm size and CSRD may seem unusual and inconsistent with many past studies, but this finding is consistent with Roberts (1992), Halme and Huse (1997), Hossain, Islam and Andrew (2006), Smith, Yahya and Amiruddin (2007), and Vormedal and Ruud (2009). Using a US sample, Robert (1992) find no statistically significant relationship between firm size and CSRD. Halme and Huse (1997) find there is no positive relationship between company size and CSRD. They argue that the extent of the corporate social responsibility disclosure data disseminated in larger company's annual reports do not appear to be better than that in the annual reports of smaller firms (that is, large firms do not report more about CSRD policies or future actions than smaller firms).

The most likely reason for this insignificant result is that the thesis's entire sample consists of very large companies (see Section 5.1). Firms choosing to be on the GRI list are by definition very large (the means of employees and total assets are 41,607 and USD 71,217.5 million respectively); thus, in a sense all are likely to be actively pursuing legitimacy and have high levels of political visibility and scrutiny. These very large companies' sizes differ insufficiently different from one another to influence their levels of corporate social responsibility disclosure. Thus, hypothesis 1 (H1) is not supported.

Second, Table 5.8 indicates that there is a positive and statistically significant association between industry type and corporate social responsibility disclosure (p-value = .032). Thus, H2 is accepted. This is consistent with the findings of Cowen, Ferreri and Parker (1987); Patten (1991); Roberts (1992); Hackston and Milne (1996); Adams, Hill and

Roberts (1998); Newson and Deegan (2002); Gao, Heravi and Xiao (2005); Nurhayati, Brown and Tower (2006), Garcia-Sanchez (2008); and Reverte (2009). These studies report that industry type affects CSRD levels, that specifically high-profile industries are likely to generate more CSRD communication. Companies operating in high-profile industries have consumer visibility, a high level of political risk, and concentrated and intense competition (Roberts 1992). As their economic activities modify or are likely to modify the natural environment, they are assumed to have a greater incentive to project a positive social image (Patten 1991). High-profile industries also have a bigger effect on their community, and therefore normally have a broader group of stakeholders to satisfy (Hackston and Milne 1996; Adams, Hill and Roberts 1998; Haniffa and Cooke 2005; Reverte 2009).

This finding supports the tenets of legitimacy theory, namely that a key reason for high-profile industries communicating more corporate social responsibility disclosure is to improve their accountability and visibility, and to maintain their firm's reputation on the global business stage (Amran, Periasamy, and Zulkafli 2011).

Third, there is a positive and statistically significant association between the presence of voluntary assurance statements and corporate social responsibility disclosure (p -value = .000), suggesting that the companies with third party assurance statements provide higher CSRD. H3 is thus accepted. This finding is in line with the argument that companies purchase assurance service to increase stakeholder and user confidence in the quality, clarity, and reliability of the social information they disclose (Simnett, Vanstraelen and Chua 2009; Kolk and Perego 2010). Since corporate social responsibility information is provided and reported by the company itself, from the key stakeholder group points of view, the credibility of these reports can be questionable. This may create a

credibility gap since the stakeholders do not blindly trust companies and therefore may feel they cannot rely on the information that is reported by the companies themselves. Therefore, companies use an assurance service to verify their CSR information.

As discussed in earlier sections, larger public companies are more visible and have more of reputation at stake. Such companies want to improve their reputation amongst stakeholders, and the adoption of a voluntary assurance service which would likely increase the credibility of their reports, is one way of bolstering their reputation. From the legitimacy perspective, the use of assurance service may lift the reputation of companies and strengthen and would further legitimise their CSR activities.

Fourth, the Table 5.8 regression (see Table 4.12 also) suggests that there is a positive and statistically significant association between jurisdictional business systems and corporate social responsibility disclosure. Hypothesis 4 is accepted. Matten and Moon (2008) support such a finding when they argue that differences in national business systems influence the ways in which corporations express and pursue their social responsibilities in different societies.

The coefficient communitarian is positive and significant at a moderate level ($p\text{-value} = .088$). This finding is consistent with Gamble et al. (1996) and Van der Laan Smith, Adhikari and Tondkar (2005). These scholars find that firms from countries that emphasize social issues are more attentive to their multiple stakeholder groups and show a higher level and quality of corporate social responsibility disclosure. Fekrat, Inclan and Petroni (1996) argue that European countries in general have had a long tradition of reporting on social and environmental concerns. For instance, German and Austrian companies have in place several initiatives for

making environmental disclosures. Chen and Bouvin (2009) note that German companies communicate social issues much more than US, UK, and Australian companies. This may indicate that the strength of key stakeholder groups such as the European Multinational Enterprises (MNEs) have influenced the extent of CSR (Konrad et al. 2006).

The coefficient for emerging market jurisdictional countries is also positive and statistically significant ($p\text{-value} = .017$) and, further, it is higher than the coefficient for communitarian ($p\text{-value} = .088$), indicating that companies in emerging market countries are more likely to disclose CSR issues than their communitarian counterparts. This result is consistent with the ANOVA tests' results provided in the previous chapter (see Table 4.12). The finding is counter to historical trends. It is not, however, without any precedent. KPMG (2008), for example, reported that the disclosure of local companies and multinational subsidiaries in emerging market areas had progressed the most when compared to other region. Wanderley et al. (2008) argue that CSR is associated with the globalisation process, which, they suggest, stimulates economic and social development in emerging economies through industrial development, growth in job markets and technological transference.

The positive relationship between companies in the emerging market jurisdiction and the extent of corporate social responsibility disclosure is also supported by Lines (2004) who notes that Asian companies are more likely to have higher levels of CSR as they attempt to differentiate themselves from their competitors and lift the profiles of their global brands. Moreover, he argues that this movement may be influenced by Western multinational companies increasing their operations in many Asian countries. Consistent with Lines (2004), Chapple and Moon (2005) suggest that the increasing operation of Western organisations such as MNEs in Asia have affected regional firms in their CSR activities and

reporting. This results in Asian companies taking a proactive approach to CSR and sustainability issues in order to build a profile that demonstrates their commitment to all of their stakeholders (Lines 2004).

In summary, from the perspective of legitimacy theory, by engaging in more corporate social responsibility activities and placing greater emphasis on corporate social responsibility disclosure, emerging market companies might better address stakeholders' holistic expectations and build a more successful business image in order to attract more funds.

Fifth, this thesis finds statistical evidence to suggest that the presence of a CSR committee affects the level of corporate social responsibility disclosure ($p\text{-value} = .015$). Hypothesis 5 is thus supported. This finding is consistent with the notion that the existence of such committees could be associated with a greater corporate propensity to communicate CSR issues (Cowen, Ferreri and Parker 1987). It may be that such a committee is an effective monitoring device for improving the range of disclosures to stakeholders. As argued by Kent and Monem (2008), CSR committees encourage companies to be more active in areas of CSR. They also act as a prompt for companies to be transparent in these disclosures. In short, CSR committees constitute a formal recognition of the CSR impacts of the activities of company.

The role of the board, such as in the form of a CSR committee which oversees CSR activities can be directly linked to a corporation's attention to CSR. When a board appoints a committee to manage and work on the social and environmental impacts of business activities, it is more likely that the company will have greater legitimacy in the community in which it operates (Mallin and Michelon 2011).

Finally, this study finds that the two control variables examined, leverage and profitability (measured by ROA), are not statistically significant (see Table 5.8). The insignificant relationship between leverage and corporate social responsibility disclosure is consistent with prior studies. Ho and Taylor (2007) find no association between leverage and triple-bottom-line (TBL) reporting for the 50 largest US and Japanese firms. The result is also consistent with Haniffa and Cooke (2005), Cahaya, Porter and Brown (2008), Liu and Anbumozhi (2009), and Reverte (2009). This finding suggests that the level of CSRD may not be related to the leverage of companies.

Furthermore, profitability is found not associated with the level of corporate social responsibility disclosure. As argued by Gray et al. (2001), the relationship between corporate social responsibility disclosure and profitability is still inconclusive. Previous studies also find that there is no relationship between CSRD and profitability (see for example Cowen, Ferreri and Parker 1987; Hackston and Milne 1996; Ghazali 2007; Branco and Rodrigues 2008; Cahaya, Porter and Brown 2008; Clarkson et al. 2008; Aerts and Cormier 2009; Reverte 2009; Liu and Anbumozhi 2009). The influence of economic performance is weak and inconsistent (Williams 1999), as TBL reporting is primarily more likely to be driven by non-economic events (Ho and Taylor 2007).

5.5 Additional Multiple Regressions by Theme⁶⁹

This section provides the results of the extra multiple regression analyses for which the dependent variable (CSRD) is broken down into six key themes, namely economic, environmental, labour practices, human rights, society, and product responsibility. The findings in the previous section (5.4) have regard to the relationships between the predictor variables and

⁶⁹ This analysis may help identify reasons (motivations) to explain variation in the specific area of CSRD practices.

corporate social responsibility disclosure, the results below are based on the total score of CSRD for each of the six key themes. Given that these six themes of disclosure reflect very different aspects of businesses' activities (Ho and Taylor 2007), it is important to explore whether the results vary across themes. This analysis will help to identify reasons for variations in these specific domains of CSRD practice (Williams 1997).

5.5.1 Economic

As discussed in Chapter Four, the economic themes consist of nine indicators (see Table 4.5).

Table 5.9 Multiple Regressions: Economic Theme

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.313	3.988	.000***
Firm size (log employees)	+	.005	.268	.789
Industry type	+	.060	2.349	.019**
Presence of assurance	+	.175	6.947	.000***
Communitarian	±	.039	1.341	.181
Emerging market	±	.099	2.929	.004***
Presence of CSR committee	+	.075	2.553	.011**
Control Variables				
Leverage	-	.141	2.195	.029**
Profitability (ROA)	+	.363	1.782	.075*
Adjusted R ²	.158			
F-statistic	11.755			
p-value	.000			
N	460			

The table shows the regression results for the entire sample (n=460). Economic theme is the dependent variable. The categories of jurisdiction are 3 (n = 3). The regression formula for dummy variable is n – 1. Hence, only 2 dummy variables are inserted into the regression model. The variable excluded from the model, Anglo-American jurisdiction, is randomly chosen. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

From the six key themes of CSRD, the economic theme is the second most highly disclosed by firms, with an average level of disclosure of 60.2

percent (see Table 4.1). Table 5.9 has an adjusted R^2 score of 15.8 percent. These specific statistical findings are very similar to the overall presented in Table 5.8. Table 5.9 notes that firm size is not related to the economic themes of CSRD. Whereas, in contrast industry type, the presence of a voluntary assurance statement, emerging market jurisdiction, and the presence of a CSR committee have a positive statistical significance.

The above findings are consistent with the main analysis in Table 5.8. The coefficient for communitarian is positive but not significant and two the control variables, leverage and profitability, are significant at the 5 percent and 10 percent confidence levels respectively. However, the sign on leverage is positive. This result is not consistent with the predicted sign, but is consistent with the findings of Roberts (1992), Naser et al. (2006), and Clarkson et al. (2008). The result suggests that companies with higher leverage tend to disclose more economic information. Further, the finding for profitability supports past studies, which suggest that profitable companies disclose economic information to legitimise their existence (Haniffa and Cooke 2005). Further still, a firm's profitability may provide managers the financial resources to cover costs of making disclosures (Brammer and Pavelin (2008).

5.5.2 Environmental

As shown in Table 4.5, the environmental theme consists of thirty indicators and is the fourth highest theme communicated by firms, with an average of 56.7 percent (see Table 4.1). Table 5.10 shows that the adjusted R^2 score is lower (9.6 percent) than R^2 score of economic theme. Table 5.10 presents the statistical results for the environmental theme. Again, firm size do not explain the level of environmental disclosures. The coefficient for the industry variable is positive and statistically significant at the 10 percent level. Cho and Patten (2007) argue that firms from

environmentally sensitive industries have incentives to disclose more information about their environmental performance. Cowen, Ferreri and Parker (1987) note that companies from the paper industry sector disclosed more environmental information than companies from other industries. The clear positive statistical relationship between the presence of a voluntary assurance statement and environmental disclosure is consistent with the prior of this thesis findings. As argued by Adams (2002) companies may include environmental verification from auditors in their reports to increase their credibility.

Table 5.10 Multiple Regressions: Environmental Theme

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.383	5.344	.000***
Firm size (log employees)	+	.019	1.152	.250
Industry type	+	.044	1.865	.063*
Presence of assurance	+	.140	6.082	.000***
Communitarian	±	.022	.818	.414
Emerging market	±	.029	.951	.342
Presence of CSR committee	+	.070	2.609	.009***
Control Variables				
Leverage	-	-.025	-.432	.666
Profitability (ROA)	+	.050	.265	.791
Adjusted R ²	.096			
F-statistic	7.116			
p-value	.000			
N	460			

The table shows the regression results for the entire sample (n = 460). Environmental theme is the dependent variable. The categories of jurisdiction are 3 (n = 3). The regression formula for dummy variable is n – 1. Hence, only 2 dummy variables are inserted into the regression model. The variable excluded from the model, Anglo-American jurisdiction, is randomly chosen *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

Moreover, as highlighted in Table 5.10, the presence of a CSR committee is also statistically related to environmental disclosures (t = 2.609; p-value = .009). This result suggests that the existence of a CSR committee

appears to be important and may contribute substantially to explaining the level of environmental disclosures. Adams (2002) notes that internal contextual factors such as the existence of a CSR committee are likely to impact the extensiveness, quality, quantity, and completeness of reporting. Interestingly, jurisdiction does not seem to be a predictor factor for environmental communication. With regard to the control variables, these results are consistent with Aerts, Cormier and Magnan (2006), Brammer and Pavelin (2008), and Michelon and Parbonetti (2012). They find that leverage and profitability are not related to environmental disclosure.

5.5.3 Labour Practices

As discussed in chapter four (see, for example, Table 4.5), the labour practices theme has fourteen indicators. Table 4.1 also notes that the labour practice theme (66.4 percent) is the highest CSRD theme disclosed by companies in their sustainability reports. The results in Table 5.11 largely consistent with those in the main Table 5.8, namely an adjusted R^2 score of 15.8 percent.

Other results to be noted are as follows. First, there is an insignificant relationship between firm size and labour practices disclosures. This finding is consistent with Cahaya et al. (2011), who note a similar insignificant association. Second, industry type, the presence of a voluntary assurance statement, jurisdiction (communitarian, emerging market), and the control variable leverage are all statistically significantly related to labour disclosures, whereas, by contrast, the presence of a CSR committee is not a statistical predictor.

The findings in this thesis support previous studies that labour practices communication can be explained by corporate characteristics and

contextual variables⁷⁰. For example, Cowen, Ferreri and Parker (1987) note a significant association between disclosures about human resources and the presence of a social responsibility committee. The Table 5.11 regression results may indicate that companies disclose labour information to maintain their legitimacy. The results also suggest that firms with higher leverage tend to communicate more labour information. Dominguez (2011) notes that leverage has a significant impact on disclosures about human resources. This implies that firms may provide labour information to mitigate pressures from creditors.

Table 5.11 Multiple Regressions: Labour Practices

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.455	6.379	.000***
Firm size (log employees)	+	-.012	-.703	.482
Industry type	+	.048	2.067	.039**
Presence of assurance	+	.151	6.583	.000***
Communitarian	±	.088	3.305	.001***
Emerging market	±	.122	3.957	.000***
Presence of CSR committee	+	.026	.984	.325
Control Variables				
Leverage	-	.142	2.428	.016**
Profitability (ROA)	+	.070	.376	.707
Adjusted R ²	.158			
F-statistic	11.752			
p-value	.000			
N	460			

The table shows the regression results for the entire sample (n = 460). Labour practices theme is the dependent variable. The categories of jurisdiction are 3 (n = 3). The regression formula for dummy variable is n – 1. Hence, only 2 dummy variables are inserted into the regression model. The variable excluded from the model, Anglo-American jurisdiction, is randomly chosen. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

⁷⁰Williams (1999) notes a positively significant relationship between human resources disclosure and industry type in five ASEAN countries. Adams, Hill and Roberts (1998) provide evidence that industry type affect employee disclosures in eight European countries. Subbarao and Zeghal (1997) also note that the incidence of employee disclosure is affected by country domicile.

5.5.4 Human Rights

The human rights theme consists of nine indicators (see Table 4.5). The descriptive statistics provided in Table 4.1 show that the mean of human rights disclosures is 49.0 percent. Table 5.12 reveals the results of the regression model for human rights. With regard to firm size, Eccels et al. (2008), as cited by Hamman et al. (2009), dispute that larger companies are likely to be more proactive on human rights issues. However, the result of this study does not support these arguments. The coefficient firm size is positive but not significant, a result that is consistent with Hamann et al. (2009) who find that company size is not significant as a predictor of human rights disclosure.

Table 5.12 Multiple Regressions: Human Rights Theme

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.162	1.732	.084*
Firm size (log employees)	+	.026	1.227	.221
Industry type	+	.056	1.828	.068*
Presence of assurance	+	.235	7.823	.000***
Communitarian	±	.047	1.349	.178
Emerging market	±	.072	1.780	.076*
Presence of CSR committee	+	.077	2.186	.029**
Control Variables				
Leverage	-	.041	.538	.591
Profitability (ROA)	+	.044	.183	.855
Adjusted R ²	.147			
F-statistic	10.902			
p-value	.000			
N	460			

The table shows the regression results for the entire sample (n = 460). Human rights theme is the dependent variable. The categories of jurisdiction are 3 (n = 3). The regression formula for dummy variable is n – 1. Hence, only 2 dummy variables are inserted into the regression model. The variable excluded from the model, Anglo-American jurisdiction, is randomly chosen. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

As displayed in the Table 5.12 findings, this thesis supports the argument that industry type has a relatively moderate influence on human rights disclosure. That is, it is statistically significant for human rights disclosures, but at a moderate level (10 percent) only. The GRI (2010) surveyed the corporate reporting of human rights practices by 100 companies. They find that companies in high-profile (e.g. extractive, energy utilities, and banks) industries report more topics relate to human rights in their sustainability reports than those in low-profile industries (e.g. manufacturing, service, and transportation).

In terms of the jurisdictional business systems variable, the statistical testing shows only marginal support for the jurisdictional predictor. The variable communitarian is not found to be a statistical predictor (regardless of human rights disclosure) and the emerging market countries only marginally disclose more human rights information in their sustainability reports than do communitarian countries. Interestingly, these results are not consistent with Wouters and Chanet (2008) who argue that European countries have adequately addressed the issues of human rights responsibilities as part of their CSR. One possible explanation for emerging market countries now disclosing more human rights information is that the Organisation for Economic Co-operation and Development (OECD) has launched clear guidelines⁷¹ for multinational enterprises operating in OECD countries. Lozano and Prandi (2005) suggest that these guidelines, which provide voluntary principles and standards, exert some pressure upon companies to engage in responsible business practices, including in the area corporate human rights.

The findings in Table 5.12 show that the presence of a CSR committee has a positive and significant relationship to human rights disclosures.

⁷¹The Guidelines are first launched in 1976 and have been updated five times. The current version is updated in 2011.

Michelon and Parbonetti (2012) suggest that a CSR committee functions as an effective monitoring device for improving the range of disclosures. By disclosing human rights information in their sustainability reports, companies can better communicate these issues to their stakeholders. From the perspective of legitimacy theory, such disclosures demonstrate a greater accountability to stakeholders and reduce the legitimacy gap. Consistent with Reverte (2009), neither leverage nor profitability appear to account for global CSRD human rights practices.

5.5.5 Society

As shown in Table 4.5, the theme of society consists of eight indicators. Table 4.1 also notes that the average for the society theme is 57.0 percent. Table 5.13 reports the results for the society theme of CSRD. In line with the other regression models, the firm size variable is not associated with society-related disclosures. However, the industry type, the presence of a voluntary assurance statement, and the presence of a CSR committee are found to be predictor factors for CSRD in relationship to society-related disclosure. The significant association between these disclosures and industry type is consistent with the findings of Cowen, Ferreri and Parker (1987) that community involvement can be explained by industry membership.

With regard to the presence of a voluntary assurance statement, the coefficient is positive and of moderate statistical significance. This result is consistent with earlier regression models. However, both the communitarian and emerging market jurisdiction variables are not statistically significant. This finding is different from the main results reported in Table 5.8. The coefficient of the presence of a CSR committee is positive and significant at the 10 percent level. In contrast to the results in Tables 5.8, 5.10, and 5.12, the coefficients of leverage and profitability are negative. They are, however, statistically insignificant.

Table 5.13 Multiple Regressions: Society Theme

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.368	4.156	.000***
Firm size (log employees)	+	.010	.495	.621
Industry type	+	.074	2.560	.011**
Presence of assurance	+	.209	7.379	.000***
Communitarian	±	.022	.665	.506
Emerging market	±	.047	1.219	.224
Presence of CSR committee	+	.065	1.960	.051*
Control Variables				
Leverage	-	-.006	-.087	.931
Profitability (ROA)	+	-.147	-.640	.523
Adjusted R ²	.131			
F-statistic	9.680			
p-value	.000			
N	460			

The table shows the regression results for the entire sample (n = 460). Society theme is the dependent variable. The categories of jurisdiction are 3 (n = 3). The regression formula for dummy variable is n – 1. Hence, only 2 dummy variables are inserted into the regression model. The variable excluded from the model, Anglo-American jurisdiction, is randomly chosen. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

5.5.6 Product Responsibility

Finally, Table 5.14 provides the results of the analysis of the product responsibility theme. The product responsibility theme consists of nine indicators (see Table 4.5). The descriptive statistics provided in Table 4.1 show that the mean of product responsibility disclosure is the lowest of all CSRD themes (46.0 percent). The results show that most of the independent variables are not statistically significant. The result of the regression reveals that there is no association between firm size and product responsibility disclosures. Cowen, Ferreri and Parker (1987) argue that firm size does not appear to influence product responsibility disclosure. In addition, consistent with Table 5.14, they also find that industry type is not a function of product responsibility disclosures. In this study, however, the presence of a voluntary assurance statement

continuous to exhibit a statistically significant positive association with CSR communication.

Table 5.14 Multiple Regressions: Product Responsibility Theme

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.324	3.453	.001***
Firm size (log employees)	+	-.018	-.841	.401
Industry type	+	.002	.068	.946
Presence of assurance	+	.198	6.590	.000***
Communitarian	±	.057	1.619	.106
Emerging market	±	.092	2.279	.023**
Presence of CSR committee	+	.049	1.406	.160
Control Variables				
Leverage	-	.101	1.316	.189
Profitability (ROA)	+	-.041	-0.167	.868
Adjusted R ²	.104			
F-statistic	7.687			
p-value	.000			
N	460			

The table shows the regression results for the entire sample (n = 460). Product responsibility theme is the dependent variable. The categories of jurisdiction are 3 (n = 3). The regression formula for dummy variable is n – 1. Hence, only 2 dummy variables are inserted into the regression model. The variable excluded from the model, Anglo-American jurisdiction, is randomly chosen *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

The jurisdictional findings in Table 5.14 are mixed. The regression results show a communitarian country do not have significant influence over product disclosure, whereas an emerging market system is found to be statistically and positively associated with these disclosures. Legitimacy tenets suggest that as companies from emerging markets seek to obtain a larger share of the developed market. tend to disclose more product information. As most of them are companies By making such product responsibility disclosures, they can improve their corporate image and legitimise their existence to multinational stakeholders. Lastly, consistent

with the statistical results provided above, leverage and profitability are not found to be determinants for product responsibility disclosures.

5.6 Sensitivity Analysis

This section provides additional tests to check the robustness of the main findings presented in Section 5.4. By using other measures of the same variables, the sensitivity analysis seeks to ensure that the inferences drawn in previous sections are as valid as possible. This section presents extra statistical analyses of the association between firm size, industry type, jurisdictional business systems and the extent of CSRD. In the main regression (Table 5.8), firm size is measured as the number of employees (see Section 3.2.3); industry type is measured by using the categories type into high-profile and low-profile industries (see Section 3.2.3); and jurisdictional business systems is classed as either Anglo-American, communitarian, or emerging market business systems (see Section 3.2.3). In this additional testing⁷², firm size is measured by total assets. Industry type is one of ten sectors: oil and gas, basic materials, utilities, financials, industrials, consumer goods, consumer services, telecommunication, technology, and healthcare industries. Jurisdictional business systems are reclassified as being either shareholder-or stakeholder-oriented.

5.6.1 Firm Size

The main regression results provided in Section 5.4 provide evidence that firm size (measured by number of employee) effects corporate social responsibility disclosure. Consistent with the main regression result that firm size is positively yet insignificantly associated with CSRD, the regression result in Table 5.15 indicates that the relationship between firm size and CSRD remains insignificant—regardless of the proxy measure.

⁷²The additional testing is not conducted for the presence of a voluntary assurance statement or the presence of a CSR committee, as these variables are dichotomous variables, (either i.e. presence or absence).

Table 5.15 Multiple Regressions Results: Alternative Measures of Firm Size

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.375	6.528	.000***
Firm size (log total assets)	+	.003	.190	.850
Industry type	+	.044	2.002	.046**
Presence of assurance	+	.169	8.001	.000***
Communitarian	±	.043	1.735	.083*
Emerging market	±	.069	2.393	.017**
Presence of CSR committee	+	.061	2.458	.014**
Control variables				
Leverage	-	.050	.888	.375
Profitability (ROA)	+	.057	.334	.738
Adjusted R ²	.164			
F-statistic	12.287			
p-value	.000			
N	460			

The table shows the regression results for all sample (n=460). CSRD is the dependent variable. Firm size is alternatively measured by total assets. The categories of jurisdiction are 3 (n = 3). The regression formula for dummy variable is n – 1. Hence, only 2 dummy variables are inserted into the regression model. The variable excluded from the model, Anglo-American jurisdiction, is randomly chosen. *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

5.6.2 Industry Type

The results in Table 5.16, demonstrate that the findings for industry type are mixed. The regression results show that two of the four high-profile industries—basic materials and utilities—are positively and significantly associated with CSRD. Yet, oil and gas, and financial do not show a significant influence on CSRD. The results also show that consumer goods and the telecommunications industries are positively significant associated with CSRD.

The results provide some support for the main finding provided in Table 5.8. Interestingly, the additional testing also shows that consumer goods

and telecommunications are statistically and significantly related to CSRD. This finding is consistent with that of Cowen, Ferreri and Parker (1987). They note that consumer-oriented industries can be expected to be more concern with demonstrating their interest about social responsibility issues, since a corporate image among mass-market consumers is likely to influence the amount of sales generated (Cowen, Ferreri and Parker 1987, 113).

Table 5.16 Multiple Regressions Results: Alternative Measures of Industry Type

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.354	4.490	.000***
Firm size (log employee)	+	.004	.268	.789
Industries:				
Oil and gas	+	.082	1.527	.127
Basic materials	+	.101	2.111	.035**
Utilities	+	.120	2.212	.028**
Financials	+	.025	.527	.598
Industrials	-	.019	.424	.671
Consumer goods	-	.143	2.774	.006***
Telecommunications	-	.116	1.987	.047**
Technology	-	.082	1.345	.179
Healthcare	-	.092	1.134	.257
Presence of assurance	+	.172	7.997	.000***
Communitarian	±	.036	1.456	.146
Emerging market	±	.073	2.561	.011**
Presence of CSR committee	+	.051	2.037	.042**
Leverage	-	.111	1.828	.068*
Profitability (ROA)	+	-.078	-.439	.661
Adjusted R ²	.176			
F-statistic	7.127			
p-value	.000			
N	460			

The table shows the regression results for all sample (n=460). CSRD is the dependent variable. In the regression model presented in Table 5.16, consumer services industry is excluded from the model. Table 5.16 the number of industries are 10 (n = 10). The regression formula for dummy variable is n – 1, hence, only 9 dummy variables are inserted in regression model. The excluding variable is randomly chosen (statistics softwares will exclude one variable automatically once all dummy variables are entered into regression equation).*, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

5.6.3 Jurisdictional Business Systems

As shown in Table 5.17, the result of the alternative analysis using legal systems (shareholder-versus stakeholder-oriented) as the measure of jurisdictional business system are consistent with the main finding reported in Table 5.8. Further, the results of the t-tests presented in Table 5.18 support the findings of the alternative regression result. The results of the independent samples t-test provided in Table 5.18 are consistent with the main finding (see Section 4.10). This finding indicates that firms from countries with a stakeholder orientation have a higher level (59.9 percent) of CSRD than firms from countries with a shareholder orientation (54.0 percent).

Table 5.17 Multiple Regressions Results: Alternative Measures of Jurisdictional Business Systems

Independent Variables	Predicted Sign	Coefficient	t-value	p-value
Constant		.413	6.342	.000***
Firm size (log employee)	+	.010	.692	.489
Industry type	+	.055	2.547	.011**
Presence of assurance	+	.172	8.230	.000***
Jurisdictional	±	-.056	-3.101	.002***
Presence of CSR committee	±	.058	2.391	.017**
Leverage	-	.026	.480	.632
Profitability (ROA)	+	.118	.704	.482
Adjusted R ²	.173			
F-statistic	14.671			
p-value	.000			
N	438			

CSRD is the dependent variable. Jurisdictional business systems is alternatively measured by a dummy variable 1 for shareholder-oriented and 0 for stakeholder-oriented. N=438 (22 of 460 firms are excluded as they could not be classified as shareholder-and/or stakeholder-oriented. They are Chinese firms and Russian firms, which fit neither category well). *, **, *** indicate significant at the 0.10, 0.05, and 0.01 level of confidence.

Table 5.18 Independent Samples t-Tests of Jurisdictional Effects

Jurisdiction	N	Mean	Levene's Test for Equality Variances		t-test for Equality Means		Mean Difference
			F	Sig.	t	Sig.	
Shareholder	199	54.0					
Stakeholder	239	59.9					
Equal variances assumed			1.695	0.194	-2.557	0.011	-0.0592
Equal variances not assumed					-2.539	0.011	-0.0592

The independent sample t-tests are performed by comparing the mean CSRDs of shareholder-and stakeholder-oriented. *, **, ***indicate significant at the 0.10,0.05, and 0.01 confidence levels.

5.7 Summary

This chapter reports the main research findings and hypotheses testing of the multivariate analysis. The results of the multivariate analysis suggest that firm size is not a determinant of corporate social responsibility disclosure. Hypothesis 1 (H1) is not supported. However, industry type, the presence of a voluntary assurance statement, jurisdictional business systems (communitarian and emerging market), and the existence of a CSR committee are found to be important determinants of CSR. Based on the Table 5.8 regression analysis, it can be concluded that Hypothesis 2, Hypothesis 3, Hypothesis 4, and hypothesis 5 are supported. Two control variables, leverage and profitability do not appear to act as determinants of corporate social responsibility disclosure.

Further regression analyses indicates the following. First, consistent with the main analysis, firm size is not a predictor of the disclosure of economic, environmental, labour practices, human rights, society, and product responsibility themes. Second, industry type is found to be a determinant of all corporate social responsibility disclosure themes except, product responsibility disclosures. Third, the result shows that the presence of a voluntary assurance statement is a key determinant of all themes of corporate social responsibility disclosure as indicated by a statistically high significance level.

Fourth, jurisdictional business systems are sometimes found to be a predictor of the disclosure of economic, labour practices, human rights, and product responsibility themes with some variations caused by location. Fifth, this study finds that the presence of a CSR committee is associated with economic, environmental, human rights, and society-related disclosures. Sixth, the results indicate that leverage is positively significant as a determinant of economic and labour practices disclosures. Profitability, on the other hand, is found to be related to economic disclosures only. Finally, the sensitivity analysis shows that the robustness tests yield results that are generally consistent with the main regression.

Chapter Six presents this thesis's key findings about the extent of corporate social responsibility and the determinants that influence the level of corporate social responsibility disclosure. Then, various implications of these results are discussed.

CHAPTER SIX

DISCUSSION AND IMPLICATIONS

6.0 Introduction

The previous chapters (Chapters 4 and 5) document the results of the descriptive statistics, univariate tests and multivariate analysis concerning the extent of corporate social responsibility disclosure (CSRD) practices and the factors that contribute to the extent of CSRD. This chapter highlights the key findings related to the research questions addressed in this thesis. The implications of these findings are then highlighted.

6.1 The Extent of CSRD

This study indicates that the overall mean of the CSRD index is 56.8 percent. This finding shows that the extent to which companies communicate corporate social responsibility disclosure is at a relatively medium level. All of the companies communicated information about at least four of 79 possible indicators. The indicators about total workforce (LA1 = 89.6 percent), direct and indirect greenhouse gas emissions (EN16 = 88.7 percent), and rates of injury (LA7 = 88.5 percent) are the indicators most communicated by firms, whilst the indicators for national conservation (EN15 = 22.4 percent), the biodiversity value of water (EN25 = 23.9 percent), and transported waste (EN24 = 27.4 percent) are the indicators least disclosed. The overarching theme most disclosed by companies is labour practices (66.4 percent), followed by economic (60.2 percent), society (57.0 percent), environmental (56.7 percent), human rights (49.0 percent), and product responsibility themes (46.0 percent) (see Table 4.1). This thesis also finds the level of CSRD-core indicators to be 64.2 percent, while CSRD-additional indicators are found to be a level that is substantially lower (44.8 percent).

The moderate level of corporate social responsibility disclosure warrants reflection. Increases with it; or if in the extent of CSRD may be influenced by several factors. First, they may be influenced by the time period in which this study is conducted. Events that are unique to a particular period may influence levels of disclosure when they happen. More contemporary events and the pressures arising from them may lead to greater levels of CSRD. For instance, Coetze and Van Staden (2011) find a significant increase in the extent of health and safety disclosure after certain major mining accidents. Organisations in the mining sector in which the incident took place disclose more information than mining organisations in sectors that did not experience major accidents. During the implementation period of the requirement for corporations to publish emission information about National Pollutant Inventory (NPI), Cowan and Deegan (2011) note an increase in the number of corporations providing voluntary environmental disclosures for the NPI in their reports

Second, corporate social responsibility communication may be affected by firm characteristics. The relationship between company characteristics and CSR varies according to the type of CSRD being examined (Gray et al. 2001). For example, certain industries such as the tobacco industry may disclose more CSR information to show that they are committed to contributing to the well-being of society when they are under growing threat as the consequences of public policy such as anti-smoking campaigns (Tsang 1998; Tilling and Tilt 2010). Adam and Kuasirikun (2000) also suggest that certain industries such as the chemical and pharmaceutical industries face extensive pressures concerning ethical issues. For instance, the export of pesticides, hazardous chemicals and drugs; labelling and packaging of chemicals and drugs; and genetics research are some issues about which the public has expressed particular concern. Each of the above could have environmental impacts of a significant magnitude. In response to such pressures, companies in these

industries may increase their corporate social responsibility disclosure communication to counter their industry's negative image and to build industry credibility.

There are other reasons that may explain differing levels of corporate social responsibility disclosure. They may be the results of economic and reputational considerations (KPMG 2008). Corporate social responsibility disclosure is driven by the desire to create good relations with stakeholders in order to increase financial returns (Belkaoui and Karpik 1989; Branco and Rodrigues 2008a). Companies with a good reputation for social responsibility are able to improve their relations with investors, bankers, suppliers, and competitors, which in turn may improve financial outcomes (Branco and Rodrigues 2008a). Aerts, Cormier and Magnan (2008) argue that companies can reduce the uncertainty surrounding earnings forecasts by relying on CSRD. For instance, information contained in CSRD indicators such as economic and environmental performance, employee and product capital expenditures, environmental liabilities, and environmental and product fines and penalties may have a direct impact on a firm's future earnings. Therefore, there are incentives for companies with good performance (i.e. high financial performance; low environmental and product liabilities, fines and penalties) to inform investors and other stakeholder groups about their CSR activities. Such voluntarily CSRD is likely to be perceived by market participants as good news.

Current studies show that there is a rise in the level of awareness that companies have about corporate social responsibility. They are aware that they are becoming ever more accountable to multiple stakeholder groups (Adam and Frost 2007; Cooper and Owen 2007; Bebbington, Larrinaga and Moneva 2008; Joshi and Gao 2009; GRI 2010). This awareness may be manifested by their producing separate, comprehensive sustainability

reports as a medium to better communicate their CSR activities. Overall, by providing higher levels of CSRD, companies can achieve numerous things. They can better address the demands of stakeholders, reduce public pressures, minimise the risks of powerful consumer boycotts by external parties (Adams 2002), improve communication with the community and other stakeholders, and legitimise their activities in a positive manner.

Greater levels of communications might also be obtained by guidance frameworks for reporting. The GRI (2010) survey notes that there is an increase in the number of national and international voluntary guidelines and/or global frameworks for sustainability reporting. For example, at the international level there are numerous contemporary guidelines (see Appendix F) rooted in prestigious international organisations such as the OECD Guidelines for multinational enterprises (2011), the United Nations Global Compact Principles (2008), and the UNPRI (2007). There are also more vocal stakeholder groups and private frameworks such as the GRI (G3) Guidelines (2006), the CERES Principles (2010), ISO 26000 (2010), and SA 8000 (2008). The presence of such frameworks to guide reporting may stimulate companies to report their CSR performance information more holistically and for a wider range of stakeholder.

In the area of jurisdictional business systems, this thesis provides new insights into CSRD practices. The thesis' results indicate that companies from emerging market countries have the highest CSRD communication level (60.4 percent) followed by companies from communitarian (55.3 percent) and Anglo-American (54.7 percent) countries (see Table 4.1). Compared to prior studies, this is a surprising finding. Evidence from past studies of corporate social responsibility disclosure suggest that companies from communitarian countries tend to be more likely disclose social information (see for example Fekrat, Inclan and Petroni 1996; Adams, Hill

and Roberts 1998; Van der Laan Smith, Adhikari and Tondkar 2005), and the emerging market areas have traditionally lagged behind both communitarian and Anglo-American countries in terms of CSR reporting (Welford 2005).

The relatively high level of corporate social responsibility disclosure in the emerging market countries may reflect the contemporary developments of standard-setting and improved regulatory environments in emerging market regions. Further, region-specific institutional pressures might play a significant role in shaping CSR communication (Dawkins and Ngunjiri 2008); that is, pressure to respect the preferences of region-specific stakeholders. Stock exchanges are one institution that may influence the operations of companies active in these regions, making it more likely that companies will comply with CSR requirement and report their CSR activities (Campbell 2006; Dawkins and Ngunjiri 2008; Chen and Bouvin 2009).

The findings of this thesis are supported by the results of surveys conducted by the World Resources Institute (WRI) and the International Finance Corporation (IFC) in six countries in Asia (India, Indonesia, Malaysia, Philippines, Thailand, and Vietnam). They note that sustainability reporting in these countries increased over the period 2004–2009. The survey concludes that this is mainly due to the recent increased efforts of governments, organisations, national securities regulators, and professional accounting associations. In summary, this significant increase in sustainability reporting has mostly been driven by three stakeholder groups: governments, non-government organisations (NGOs), and investors (World Research Institute and International Finance Corporation 2009).

The results can also be partially explained by the growing presence of voluntary international and national standard guidelines for preparing sustainability reports. As cited by GRI (2010) the increased use of reporting guidelines is evident in important emerging countries such as Brazil, China, India, and South Africa. For example, Brazil has voluntary standards such as the Carbon Disclosure Project and the Ethos Indicators for corporate social responsibility. China has guidelines for environmental disclosures, guidelines for State-owned Enterprises fulfilling corporate social responsibilities, special industry guidelines about corporate social responsibility for banking financial institutions, guidelines for apparel and textile enterprises, and for industrial corporations and federations. India also has voluntary CSR guidelines and, finally, South Africa has the King III Report (2010) on corporate governance guidelines. These guidelines might have an impact within those countries, especially in emerging market which favour the use of international guidelines to demonstrate compliance with international norms. By complying with the guideline, for instance, with the GRI Guidelines, they might respond to stakeholders need.

6.2 Insights Regarding Themes of CSRD

Data concerning the different levels of communication of themes are provided in Figure 4.1 and Table 4.2. The emerging market countries lead in the communication of all themes of corporate social responsibility disclosure.

There are several possible reasons for these findings. First, previous studies show that companies, particularly in emerging market countries, now tend to disclose more labour information than they do many other themes in their annual and/or sustainability reports. Companies in the emerging market countries may well be aware of the concern of governments to improve the working conditions and the living standards of

the workers. Disclosures of labour information would include details of basic salaries, occupational health and safety, benefit, training and education (Andrew et al. 1989).

In summary, companies in the emerging market countries are found to be placing greater emphasis on labour disclosure, most likely to mitigate pressures and criticisms from stakeholders and to better address these stakeholders' holistic expectations. Achieving each of these would help such companies attract capital (see for example Teoh and Thong 1984; Newson and Deegan 2002; Kuasirikun and Sherer 2004; Gunawan, Djajadikerta and Smith 2009; Azim, Ahmad and Islam 2009; Pratten and Mashat 2009; Islam and Deegan 2010; Belal and Cooper 2011).

This thesis finds that information about total workforce by employment type and region (LA1) and rates of injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities by region (LA7) is most communicated by firms (LA1 = 412 firms or 89.6 percent; LA7 = 407 firms or 88.5 percent) (see Table 4.5). This finding indicates that communicating about these indicators seems to be very important for companies, especially for multinational companies. A multinational bank company report states that:

An inclusive and energised workforce is vital to the success of our business strategy to become a major financial services organisation in the region (ANZ Corporate Responsibility Review 2009, 32).

Similarly, a leading Chinese bank declares that:

The Bank believes that its most important asset is its employees. Bank of China has a competent and diverse employee team. As at the end of 2009, the Bank had 262,566 employees (Bank of China CSR Report 2009, 46).

Concerning rates of injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities by region (LA7), one mining company, for example, claims:

Of all the aspects of sustainability that we cover in this report, safety is the most important. We will continue with operation and issues specific safety campaigns. Fundamental to safety is to bring about a change in the sort of behaviour that places employees at risk and to encourage safe work practices at all times (DRDGold Sustainable Development Report 2009, 6).

Past studies note that high-profile multinational companies face the most criticisms about workplace accidents (Islam and Deegan 2010) and number of fatalities (Coetzee and Van Staden 2011). Therefore, it could be that companies with higher rates of injury, workplace accidents or number of fatalities will be more likely to have higher levels of disclosure about labour-related issues. As argued by Coetzee and Van Staden (2011), the poorer of company's occupational health and safety record (OHS) in terms of number of fatalities, the greater media scrutiny its OHS practices will attract. This increased media attention poses a threat to a company's legitimacy.

By disclosing more about labour themes, companies could preserve or restore their legitimacy (Aerts and Cormier 2009), satisfy the expectations of stakeholders (Branco and Rodrigues 2008), make better investments (Subbarao and Zeghal 1997), influence public opinion (Lahteenmaki and Laiho 2011), reduce pressures from unionized labour force (Belal 2001) and international lending institutions (Rahaman, Lawrence and Roper 2004), and legitimise their activities to highly visible employee stakeholder groups (Brown, Tower and Taplin 2005). Labour disclosures also may be made in order to secure the support of the providers of labour capital and, possibly, as marketing tools to demonstrate values that converge with those of their consumer (Holder-Webb et al. 2009).

The motivations of companies to communicate more corporate social responsibility disclosure in areas such as labour practices are also encouraged by governmental guidelines (Kuasirikun and Sherer 2004) and by coercive pressure from governments (Cahaya et al. 2011). Currently, there are a plethora of specific voluntary guidelines for labour disclosure. For instance, at the global level, there is the SA 8000⁷³ standard and at the regional level, in 2005 (latest revision in 2011) the OECD has guidelines for multinational enterprises operating in OECD countries. One of the aims of these guidelines is to encourage multinational enterprises (MNEs) to communicate information that could include data on the relationship between labour and other stakeholders.

As discussed in Chapter Four, economic themes are the second most highly disclosed by sample companies. This finding is consistent with the KPMG (2008) survey, which reports that economic considerations are drivers for CSR. As shown in Table 4.5, a high number of companies report information about revenues, operating costs, employee compensation, and donations (EC1) (396 firms or 86.1 percent). This finding may imply that such information is considered the most important for resource management. Yet, fewer than 50 percent of the companies reported information about financial assistance received from government (EC4) and are often silent about a range of ratios of standard entry level wages compared to local minimum wages at significant locations of operation (EC5). The main reason for the lower responses may be a belief that these indicators are not relevant to their organisation. Some companies, for example, report:

⁷³The SA8000 standard is a voluntary, universal and auditable standard concerning decent work conditions that was developed by Social Accountability International, a multi-stakeholder NGO initiative. The SA8000 standard is based on the core conventions of the International Labour Organisation (ILO), the United Nations Convention on the Rights of the Child, and the Universal Declaration of Human Rights (Social Accountability 2008), (See Appendix F).

We are unaware of any subsidy paid to us during 2009 (Newcrest Mining Sustainability Report 2009, 23).

OeKB did not receive any funding or sponsorship in 2009 (Oesterreichische Kontrollbank AG GRI Index 2009, 7).

Having regard to the nature of the Group's businesses and having made limited internal inquiries, we do not believe that the Group is a significant or material recipient of subsidies other than deductions allowed by tax legislation for all relevant or qualifying tax payers. Therefore, on the basis of materiality we have not reported this information (National Australia Bank GRI Index 2009, 7).

There are reasons for the relatively high level of disclosures for the economic theme. Most companies perceive economic performance as a core reflect of the successful operations of the company. Past studies show that corporate social responsibility disclosure is often determined by economic performance (see for example Belkaoui and Karpik 1989; Al-Tuwaijiri, Christensen and Hughes 2004; Clarkson et al. 2008).

This thesis finds a positive relationship between profitability and economic disclosures (see Table 5.9). This implies that profitable companies disclose more economic information, most likely to legitimise their existence (Haniffa and Cooke 2005). As their economic performance increases, companies have a greater economic capacity to engage in CSR activities such as donations to local communities or establishment of employee training programs (Cahaya 2006). Therefore, communicating economic performance may be important for companies, particularly in emerging markets (see regression result in Table 5.9), to create a more successful business image in order to better attract capital. This thesis's finding supports legitimacy theory tenets that suggests companies disclose more about company performance in sustainability reports as a means of building their image and legitimising their existence.

Concerning society themes, this thesis shows that the indicators most disclosed by firms are community indicators (SO1) (328 firms, 71.3 percent) (see Table 4.5). This indicates that disclosing information about charities, with which they are associated, public health sponsorship, corporate giving, educational facilities, scholarships, and blood donation programs and the like is of substantial importance to companies. Not surprisingly, this type of information is easily and well communicated in sustainability reports (Gunawan, Djajadikerta and Smith 2009). It is reasonable to believe that community disclosures should be more reliable than those about other societal indicators. This is because community activities attract public attention and can be readily verified by outside parties (Tsang 1998). One company that does provide significant community disclosure states:

As one of Australia's largest companies, with customers, employees and operations across the country, Telstra is naturally a part of community life. It makes sense for us to be actively involved with the communities where Telstra people live and do business, it helps us know our customers better and understand their particular needs, whether they are in a remote or rural community, or in one of our big cities (Telstra Corporate Responsibility Report 2009, 46).

This finding paints a useful picture of how companies engage with the societies in which they operate. The indicators least communicated by companies (170 firms, 37.0 percent) are total numbers of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices (SO7). One explanation for this may be that, although these indicators may be relevant for companies, their non-disclosure could be due to a narrow understanding of the activities that relate to these indicators.

As discussed in Section 5.1 (see also Table 5.1), the sample of this thesis is composed of large firms. Past studies argue that the larger the size of the firm the higher their visibility (Trotman and Bradley 1981; Cowen, Ferreri and Parker 1987; Aerts and Cormier 2009). Presenting a positive

social image with the general public is likely to be very important to companies with high public visibility (Branco and Rodrigues 2008). Since communication about societal factors are related to how a company links with a society through its community involvement, companies with a high public profile—and, presumably, greater exposure to the communities in which they operate—would be expected to have greater incentives to make more disclosures.

To further legitimise their operations, companies might use society disclosures about community involvement to maintain their reputation and/or to satisfy the expectations of stakeholders. By maintaining a good relationship with communities nearby a company, they seek to insure that their activities operate effectively and are congruent with the societal environment (Gunawan 2010).

With regard to environmental themes, Table 4.5 shows that total direct and indirect greenhouse gas (GHG) emissions indicators (EN16) are the highest reported (408 firms, 88.7 percent) environmental theme. The issue of greenhouse gas emissions has become a main corporate concern. Current studies show that there is increased debate, discussion and interest in climate change, pollution and emissions. For example, the disclosure of greenhouse gas emissions has attracted increased public attention since the United Nations' Kyoto Protocol is issued in an attempt to reduce greenhouse gas emissions (Rankin, Windsor and Wahyuni 2011). As an aviation company states:

Air France-KLM set up a 'Climate Action Plan' to combat climate change. As part of this, the Group: supports the Kyoto Protocol; continues to modernize its fleet, contributes to aviation research, and encourages the entire supply chain to cut CO₂ emissions; asks all its staff to work towards ambitious environmental action plans, from fuel saving in the sky to cutting emissions on the ground; provides its customers with transparent and reliable information on their travel-related CO₂ emissions, via a calculator based on real operating data,

and opportunities to compensate them (Air France-KLM Corporate Social Responsibility Report 2009, 20).

Another example is that in Australia, attempts to reduce carbon pollution emissions can be seen in the introduction of the Carbon Pollution Reduction Scheme (CPRS) (Cowan and Deegan 2011). The CEO and Managing Director of a cement company reports:

Boral's businesses will offset the increased costs associated with the CPRS with price increases and cost reduction initiatives. However, the estimated incremental costs as a result of the CPRS for Boral's cement business will increase by a factor of around six times from 2012 to 2017 (and will continue to grow) as a result of a decline in EITE assistance of 1.3 percent per annum, the removal of the 5 percent "recession buffer" and the increase in the price of carbon. To preserve Australia's competitiveness, in the absence of a global carbon price, sectoral review mechanisms must be a feature of the CPRS legislation. We are continuing to reinforce these issues with the Australian Government (Boral Limited Sustainability Report 2009, 2).

This finding is consistent with KPMG (2008) and GRI (2010) surveys, the results of which conclude that a number of the disclosing firms acknowledge the importance of climate change. Perhaps the relatively high level of communication about GHG emissions may be influenced by the implementation guidelines such as those mentioned above.

Past studies provide evidence that companies use environmental disclosure as a strategic mechanism (Deegan and Rankin 1996; Deegan, Rankin and Voght 2000). As mentioned, the percentage of companies that disclosed their greenhouse gas emissions is 88.7 percent (see Table 4.5). This finding may indicate that most companies (408 firms) have increased their disclosure levels due to increasing pressure about climate change issues. Disclosure focussing on GHG emissions seems to reduce public pressures upon companies, which in turn, is a response to a legitimacy threat (Patten 1991; Deegan and Gordon 1996).

Previous studies argue that companies with poor environmental performance are likely to disclose more about environmental issues (Al-Tuwaijiri, Christensen and Hughes 2004). In other words, companies that emit more greenhouse gas are more likely to disclose this in sustainability reports. However, Cowan and Deegan (2011) posit that companies communicating such emissions disclosures do so purely as a legitimising exercise.

Concerning human rights themes, the child labour indicator (294 firms, 63.9 percent) (see Table 4.5) is most disclosed by companies. The indicator child labour (HR6), is particularly interesting. This indicator encompasses corporate policies to eliminate the incidence of child labour, an area of particular relevance to companies in emerging market countries. Perhaps surprisingly, this thesis finds that the companies in these countries are leading the world in human rights communication. Brazil, Mexico, Malaysia, and India have very high human rights disclosures indices (see Table 4.2). As argued by Islam and Deegan (2010) many high-profile multinational companies, especially in developing countries, have been the object of global criticisms about controversial policies such as using child and forced labour. Therefore, disclosing a company's policy about child and forced labour, indicating such things as the significant risk of incidents of child labour and their committed to the elimination of child labour, are very important for companies. These could be viewed as strategic ways of meeting stakeholder expectations and thereby legitimising a company's activities. Some mining companies, for example, report:

In the value chain, we seek to improve awareness of human rights, with a special focus on the eradication of forced labour and child labour and on the promotion of the rights of children and adolescents (Vale Sustainability Report 2009, 114).

We are committed to ensuring that our employees and contractors uphold the elimination of all forms of forced and compulsory labour and we support the effective abolition of child labour (Barrick Gold Corporation Responsibility Report 2009, 25).

AngloGold Ashanti is committed to upholding the basic labour rights enshrined in the Fundamental Rights Conventions of the ILO as expressed in the legislation, regulations and practices of the countries where we operate. The company's employment policies and practices prevent it from hiring minors (AngloGold Ashanti Sustainability Review 2009, 63).

With regard to product responsibility disclosures, this thesis finds that health and safety product and services (PR1) are the indicators most communicated by companies (297 firms, 64.6 percent) (see Table 4.5). This thesis also notes that information about the health and safety of products and services (PR1) is more likely disclosed by companies in low-profile industries (see Table 4.13). One possible reason for this is that the nature of low-profile industries, such as consumer goods, technology and healthcare industries, necessitates a focus on product safety. These industries are expected to exercise due care in the design of their products and services, to ensure they are fit for their intended use and do not pose unintended hazards to health and safety. One company that does provide a disclosure about the health and safety of their products and services states:

In accordance with international law and customer requirements, Qisda formulated a 'Hazardous Material Management Checklist' for use of chemical substances in products or in the production process and for the strict control of the influence of chemical substances on environmental health and safety. Qisda observes all specially designated chemical substance standards and strenuously requires all suppliers to restrict or prohibit the use of hazardous chemical substances (Qisda Corporate Sustainability Report 2009, 69).

The emphasis on product responsibility disclosures, especially the health and safety of products and services is consistent with legitimacy theory

tenets, which posit that disclosures are used in the pursuit of building or maintaining legitimacy within a social environment (Islam and Deegan 2008). Interestingly, the indicator in this area shows information about the total number of incidents of non-compliance with regulations and voluntary codes concerning product and services (PR7) is the least indicator communicated by companies (149 firms, 32.4 percent). One likely explanation is that most companies might perceive that such information is sensitive and they may not wish to highlight those areas that they may not be fully addressing. Thus, by partially or non total-disclosure, companies seek to lesser the possibility of a bad image among their customers.

Arguably, product responsibility disclosures are primarily aimed at customers to maintain consumer loyalty and market share. For instance, the communication of more information about the health and safety of products could be used as a marketing tool to demonstrate that the values of companies are convergent with these of customers. Moreover, such disclosures may also be seen as a means to increase sales and influence customers' purchasing behaviours.

In summary, most of the sample companies (66.4 percent) disclose about labour practices indicators. The emerging markets companies lead in communicating in all indicators of corporate social responsibility disclosure (CSRD). These findings imply that firms in emerging market countries in particular are placing greater emphasis on CSRD communication: (1) to better address stakeholder holistic expectations, in order (2) to attract capital and (3) build a more successful business image.

6.3 Determinants of CSRD

To answer the second research question, regression analysis is conducted to test the relationship between predictor variables and the extent of corporate social responsibility disclosure by using a disclosure

index based on legitimacy tenets. Table 6.1 summaries the results of the hypotheses testing (based on the Table 5.8 regression model). As shown in Table 6.1, Hypotheses 2 to 5 are accepted, whilst Hypothesis 1 is rejected.

Table 6.1 Summary: Hypotheses Testing

Variables	Hypotheses	Results
Firm Size	H1: There is a positive relationship between firm size and the extent of CSRD in sustainability reports.	Rejected
Industry Type	H2: Firms in high profile industry will provide a higher extent of CSRD in sustainability reports than firms in low profile industry.	Accepted
The Presence of Voluntary Assurance	H3: There is a positive relationship between the presence of voluntary assurance statement and the extent of CSRD in sustainability reports.	Accepted
Jurisdictional Business Systems	H4: There is a relationship between jurisdictional business systems and the extent of CSRD in sustainability reports.	Accepted
The Presence of CSR Committee	H5: There is a positive relationship between the presence of a CSR committee and the extent of CSRD in sustainability reports.	Accepted

The table shows a summary of the hypotheses testing results based on the Table 5.8 multiple regression results

This means that four independent variables, namely industry type, the presence of a voluntary assurance statements, jurisdictional business systems, and the presence of a CSR committee are found to be predictors of the extent of corporate social responsibility disclosure, whereas firm size is found to be not statistically significant as a determinant of CSRD. The discussion of these results is in the following sub-sections.

6.3.1 Firm Size

Hypothesis 1, which states there is a positive relationship between firm size and the extent of corporate social responsibility disclosure in sustainability reports, is rejected (see Table 5.8). This somewhat surprising result indicates that the influence of firm size on the overall CSRD index is statistically insignificant. This finding is not in line with the vast majority of the literature on legitimacy theory, but it is consistent with Roberts (1992), Moneva and Llena (2000), and Van Staden and Hooks (2007).

Some possible explanations for the finding of non-significance follow. First, it could be a function of the sample set composition. The vast majority of this thesis sample is very large companies (see Table 5.1 and Figure 5.1). Past studies argue that larger companies have higher political visibility, and that such companies are much more likely to provide corporate social responsibility disclosure (see for example Hackston and Milne 1996; Aerts and Cormier 2009). Yet, virtually all of the sample companies arguably already have high political visibility (as most of them are considered very large within their respective countries (see Table 5.1) and thus virtually all are likely to be concerned about legitimacy issues. They are more likely to disclose more CSRD.

Second, size may not be a continuous function for corporate social responsibility disclosure because smaller firms may have alternative channels of communication (Gray, Kouhy and Lavers 1995). For instance, smaller firms may use news papers or brochures for their CSRD—perhaps due to the lower cost of producing and distributing such media (Zeghal and Ahmed 1990). Thus, number of employees and financial size (total assets) may be less relevant than political presence and public visibility.

Another possible explanation is that smaller firms may be equally motivated to communicate their CSR, because the marginal utility of enhanced legitimacy or an improved reputation is possibly greater for smaller firms than for larger firms (Udayasankar 2008). Given that CSR is a way to legitimate their activities and legitimacy substantially enhances firm performance, it is likely that smaller firms will also attempt to gain legitimacy. For instance, disclosing their corporate social responsibility activities may help these firms gain access to and secure various resources. Firms with constrained or inadequate resource access may use CSR as a strategic means to acquire such resources, sometimes to the exclusion of competitors (Udayasankar 2008, 170).

6.3.2 Industry Type

Industry type is a significant explanatory variable that influences the extent of corporate social responsibility disclosure (see Table 5.8). The reason for this is that high profile industries are more likely to be scrutinized by the general public and socially sensitive stakeholder groups. High-profile companies are those operating in starkly visible industries, such as basic materials (mining, chemicals, forestry and paper), utilities, and oil and gas. These industries are more exposed to and influenced by the political, social and environmental factors (Newson and Deegan 2002). For instance, the basic materials and utilities industries are more likely to generate greater public concern and regulatory scrutiny as their operations emit greater levels of harmful GHGs (Kolk, Levy and Pinkse 2008). Also, compared to other sectors the mining industries face some of the steepest challenges, as their activities generate significant social concerns in terms of their environmental impact and the health and safety of their employees. (Coetzee and Van Staden 2011). Such pressures as these drive high profile companies to communicate more about their CSR activities.

This finding is consistent with past studies (Cowen, Ferreri and Parker 1987; Patten 1991; Roberts 1992; Lynn 1992; Hackston and Milne 1996; Adams, Hill and Roberts 1998; Newson and Deegan 2002; Gao, Heravi and Xiao 2005; Nurhayati, Brown and Tower 2006; Reverte 2009; Aerts and Cormier 2009; Rankin, Windsor and Wahyuni 2011). These studies argue that type of industry is related to CSR activities. The results of this thesis show that the extent of corporate social responsibility disclosure for high-profile industries (59.2 percent) is statistically higher than for low-profile industries (54.4 percent). This is consistent with legitimacy theory tenets. By way of explanation, high-profile industries may be more active in communicating CSRD than low-profile industries because they face greater pressures to meet stakeholders' expectations.

Firms from high-profile industries also tend to disclose more corporate social responsibility information than firms from low-profile industries as they are subject to a wide range of regulations, for instance environmental regulations (Da Silva Monteiro and Aibar-Guzmán (2009). As a result, if a firm does not disclose CSR information, this could be interpreted by the firm's stakeholders as a signal of poor CSR performance. Poor perception of a firm by shareholders and stakeholders is very costly to that firm (Amran, Periasamy and Zulkafli 2011). Avoiding such costs is strong incentives for firms to engage in CSRD.

6.3.3 The Presence of a Voluntary Assurance Statement

This study concludes that the presence of a voluntary assurance statement affects the extent of corporate social responsibility disclosure (see Table 5.8). This finding is consistent with the findings of Moroney, Windsor and Aw (2011) that assurance enhances the quality of CSRD. The extent of corporate social responsibility disclosure for assured companies (66.7 percent) is far higher than for those companies not assured (48.4 percent). A possible explanation of this is that assurance

improves the credibility and transparency of sustainability reports (Deegan, Cooper and Shelly 2006; Simnett, Vanstraelen and Chua 2009; Kolk and Perego 2010). The presence of independent professional assurance acts to positively influence the perception of the quality and reliability of a company's reporting process. The presence of an assurance statement can be seen to assure: the accuracy and completeness of CSR information reported; that the report has been prepared in accordance with a particular set of reporting guidelines and has consulted with its key stakeholders; and that internal policies and related management systems have been implemented (GRI 2006; Deegan, Cooper and Shelly 2006). For example, companies may have an incentive to provide incomplete information about their environmental performance (i.e. level of reduction carbon emissions, greenhouse gas emissions, non-compliance monetary fines). In this case, the company will have the incentive to enhance the credibility of their report by adopting voluntary assurance in order to secure their organisational legitimacy.

The findings of this thesis are consistent with legitimacy theory tenets. Commentary and/or approved in the form of an assurance statement, given by third parties such as auditors or experts in other field of social responsibility may enhance a company's reputation. In addition, a voluntary assurance statement might be used by a company to further legitimise their actions.

6.3.4 Jurisdictional Business Systems

Hypothesis 4 states that there is a relationship between jurisdictional business systems and the extent of corporate social responsibility disclosure in sustainability reports. This findings support this hypothesis and provide clear evidence that jurisdictional business systems affect the extent of CSRD. Specifically, the findings indicate (see Table 4.1) that companies from the emerging market (60.4 percent) countries disclosed

higher CSRD than communitarian (55.3 percent) and Anglo-American (54.7 percent) countries respectively. This finding differs significantly from past findings (see for example Adams, Hill and Roberts 1998; Williams 1999; Newson and Deegan 2002; Van der Laan Smith, Adhikari and Tondkar 2005; Orij 2010), where companies from emerging market countries have been found to have had lower communication levels.

From a legitimacy lens, it can be seen that by engaging in more CSR activities and communicating higher levels of corporate social responsibility disclosure, these companies from emerging market countries might better address stakeholders' expectations and build a more successful global business image in order to gain a competitive edge, and attract and retain more financial capital. In other words, they may need to work harder and communicate better to attract new investors. Cheung et al. (2010) find a positive and significant association between CSR performance and market valuation in Asian Emerging Markets (AEMs). They argue that high-value stocks in emerging markets attract international investors, and that greater international investor participation leads to better performance in CSR.

The results also suggest that companies from communitarian countries are more likely to disclose more CSR information than those from Anglo-American countries. This finding is consistent with Tschopp (2005). He finds that corporate social responsibility disclosure in European Union countries is greater than in US. This may be because the geopolitical atmosphere in communitarian countries is more conducive to focusing on CSR concerns (Tschopp 2005) and place more emphasis and focus on multiple stakeholders (Van der Laan Smith, Adhikari and Tondkar 2005).

6.3.5 The Presence of a CSR Committee

The evidence of this thesis shows that the presence of a CSR committee is also a significant predictor of the extent of corporate social responsibility disclosure (see Table 5.8). Past studies note that internal organisational factors such the presence of a CSR committee influence the nature and extent of reporting (Adams 2002). This thesis's finding is consistent with Cowen, Ferreri and Parker (1987), Kent and Monem (2008), and Mallin and Michelon (2011). This thesis supports the arguments that the presence of a CSR committee encourages a company to demonstrate greater accountability and transparency (Kent and Monem 2008) and motivates a firm to implement corporate social responsibility policies (Rankin, Windsor and Wahyuni 2011). This thesis highlights that the extent of CSR disclosure is higher for companies which do have a CSR committee (61.8 percent) than for those do not (55.1 percent) (see Table 4.13).

From a point of view of legitimacy theory, the findings of this thesis suggest that the presence of a CSR committee could strengthen the public perception of corporate legitimacy and could enhance corporate image. The public may value an entity and consider it more transparent and accountable if it has a CSR committee. Such a committee could serve as a mediator among different stakeholder groups and it could also act as an assisting, monitoring and supervising mechanism to better ensure that companies have well addressed CSR issues—including external communication. Moreover, a CSR committee is typically has responsibility for several functions: defining and implementing the environmental management system; coordinating the dissemination and implementation of environmental and sustainability policies; ensuring ongoing dialogue and involvement with stakeholders; and responding to stakeholder information requests regarding company sustainability policies and initiatives.

6.4 Implications

The findings of this thesis offer insights into corporate social responsibility disclosure global practices in the international arena. This section highlights the key implications of this thesis in the light of the choice of theoretical framework. It also compares these results to results obtained in past studies.

This thesis suggests that legitimacy theory is helpful in explaining the motivations of companies providing corporate social responsibility disclosure (CSRD). Legitimacy theory is based on the notion that organisations seek to ensure that they are operating within the bounds and norms of their respective societies (Deegan 2002; Islam and Deegan 2008). This provides important insights about how legitimacy theory can be applied to explain variations of CSRD across jurisdictions. It does this by showing that type of industry, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee explain the variation of CSRD across companies.

This study indicates that firm size is not a significant predictor of the extent of corporate social responsibility disclosure. Legitimacy theory predicts that firm size will affect the firm's visibility to the general public and will tend to create increased public scrutiny (Cormier, Magnan and Van Velthoven 2005; Aerts and Cormier 2009). The result is consistent with Van Staden and Hooks (2007), who suggests that firm size might not impact CSRD practices. The implication of this finding is that future studies might consider redefining firm size by revising the measurement of political visibility, for example, the firm size variable might be remeasured by a relative size proxy (e.g. a company's market capitalization divided by the market capitalization of its entire stock exchange). Such a measure might better reflect the national impact and influence of any one company.

The positive significant relationship between industry type and the extent of corporate social responsibility disclosure implies that high-profile industries have a stronger commitment to externally communicate their CSR activities than do low-profile industries. More sensitive companies have more potential pressure from stakeholder groups. From a legitimacy perspective, the main reason high-profile industries choose to disclose more of their CSR activities is to improve their accountability and visibility and to enhance their corporate image.

The results of this thesis imply that regulatory bodies should try to get low-profile industries to provide more CSR information. Regulatory measures may be necessary to ensure all companies agree to implement GRI-style guidelines and to ensure that implementation is uniform for all industries. Given there are no mandatory requirements for any industry to disclose all six themes of CSR information, regulators and the accounting profession should at the very least strongly encourage further voluntary CSR to enhance transparency and accountability. Professional education may be a vehicle for such persuasive pursuits.

This thesis also shows that the presence of a voluntary assurance statement is helpful in explaining the extent of CSR. This finding is consistent with Moroney, Windsor and Aw (2011). Legitimacy theory tenets suggest that the presence of a voluntary assurance statement can enhance a company's image by providing highly credible sustainability reports. This thesis confirms this to be the case.

To enhance credibility reports, this thesis offers a suggestion for regulatory bodies and the accounting and auditing professions. These groups can play a more active role in helping to increase public confidence in their competency and legitimacy as high-quality assurance providers for such non-traditional communication (Deegan, Cooper and Shelly 2006; Simnett,

Vanstraelen and Chua 2009). For example, bodies such as the International Auditing and Assurance Standards Board (IAASB), GRI, and the International Federation of Accountants (IFAC) could evolve developing specific global standards for assurance in sustainability reports. Such standards would lead to higher levels of reliability, comparability, and homogeneity of current assurance practices. As sustainability report assurance activities are an important aspect in enhancing transparency and accountability of companies, there is a need for further research in this area.

This thesis notes that emerging market countries are now leading the reporting of CSR issues. Past studies show that communitarian countries (such as many of the continental European countries) are more likely to disclose CSR information than are Anglo-American (see Section 2.5.4). Taking account of jurisdictional business systems is particularly important for understanding global CSRD. This thesis gives new insights, by employing legitimacy theory to better explain the differences in levels of corporate social responsibility disclosure across jurisdictions. Consistent with legitimacy theory, the findings of this thesis suggest that emerging market countries use CSRD as a way to create a positive image which may help them obtain funds from foreign direct investment or overseas private and institutional finance.

The implication of this thesis is that there is a need for further research to explain the importance of jurisdictional business systems in differing disclosure practices across jurisdictions. The findings of this thesis could be complemented by qualitative research into why emerging market companies are currently leading in communicating of CSR themes. For instance, the role of initiative bodies, the influence of governments, other stakeholders, and culture could be explored in the different locations. A practical implication of this thesis is that organisations such as the

International Accounting Standard Board (IASB) should consider developing legislations and guidelines in order to harmonize corporate social responsibility disclosure practices across countries.

This thesis notes that the presence of a CSR committee is related to the extent of corporate social responsibility disclosure. From a theoretical viewpoint, this result provides support for the argument developed by Adams (2002) related to the role of internal contextual factors influencing the extent of corporate social responsibility disclosure. CSR committees are established to manage issues related to CSR activities. They also have responsibility for controlling how CSR activities impact other business' activities (Mallin and Michelon 2011). By placing a CSR committee at the board or executive level, companies might better address the strategic CSR issues such as environmental management, reporting, community involvement and other issues. A CSR committee can also be seen as a means of dealing with stakeholders and addressing the legitimacy gap (Michelon and Parbonetti 2010). It can also acts as a vehicle for communication between companies and their stakeholder groups.

From the perspectives of legitimacy theory, the presence of a CSR committee could be viewed as a positive signal to stakeholders about the company's concern and commitment of companies involving in CSR activities. Such concern and commitment enhances a company's reputation. Stakeholders might feel the presence of a CSR committee demonstrates greater accountability and sound and transparent good corporate governance practices.

The implications of this thesis point to promising avenues of research. Academic researchers should further explore the role of a CSR committee in influencing the process of corporate social responsibility reporting. The

degree to which the presence of a CSR committee affects corporate social responsibility disclosure needs to be analysed in more detail, beyond the distinction of CSR committee structure (see Table 4.12). The level of independence in making CSR decisions may differ between CSR committees formed under the control of board of directors and those that are under the executive committee. From a practical point of view, these findings offer insights to governance standard setters or regulators concerning the role of a CSR committee in enhancing the credibility of sustainability reports.

This thesis shows that the control variables, namely leverage and profitability, do not significantly influence the extent of corporate social responsibility disclosure, but do partially affects specific themes of CSRD. The evidence shows that leverage is not as a determinant of corporate social responsibility disclosure, a result that is consistent with several prior CSRD studies (see for example Haniffa and Cooke 2005; Cahaya, Porter and Brown 2008; Reverte 2009). The insignificant relationship between leverage and CSRD indicates leverage (as proxy of creditors pressure) is not sufficient to compel companies to disclose more CSR data.

This thesis notes that profitability does not significantly influence corporate social responsibility disclosure, a finding that supports a number of past studies (see for example Cowen, Ferreri and Parker 1987; Hackston and Milne 1996; Branco and Rodrigues 2008; Cahaya, Porter and Brown 2008; Aerts and Cormier 2009; Reverte 2009). Arguably, the results of this thesis imply that economic performance is not a key factor that determines corporate social responsibility activities. Therefore, the argument that corporate social responsibility disclosure is not mainly driven by economic factors is supported (Ho and Taylor 2007). This result is also consistent with William's finding (1999) that CSRD may be more closely associated with public pressure rather than economic pressure. One implication of

this finding is need for future research to consider a longitudinal study approach. As argued by McGuire et al. (1988) and Purushothaman et al. (2000) as cited by Cahaya, Porter and Brown (2008), the association between economic performance and CSRD may exist over a longer time period.

Overall, this thesis highlights that the extent of corporate social responsibility (CSRD) is linked to industry type, the presence of voluntary assurance statement, jurisdictional business systems, and the presence of CSR committee. The findings of this thesis have implications for and offer insights to both academic researchers and regulatory bodies.

6.5 Summary

This chapter highlights the results of this thesis in relation to the extent of CSRD. The thesis finds that on average the extent of global corporate social responsibility disclosure is at a relatively medium level (56.8 percent). The variation of the extent of corporate social responsibility disclosure can be explained by industry type, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee. Size is not found to influence the extent of CSRD. In aggregate, these results suggest that legitimacy theory can help predict the extent of CSRD practices in the international arena.

The final chapter provides a summary of this thesis and makes further recommendations for future research.

CHAPTER SEVEN

AN INTERNATIONAL STUDY OF CSR COMMUNICATION

7.0 Overview of the Study

The primary objective of this study is to provide comparative evidence about the corporate social responsibility disclosure (CSR) practices of companies around the world. This thesis empirically investigates company characteristics, the presence of a voluntary assurance statement, institutional factors and internal context variables that determine the extent of corporate social responsibility disclosure. The specific factors that have been examined are firm size, industry type, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee. Legitimacy theory is employed, because it offers a useful framework for explaining what motivates companies that provide CSR.

The sample set of this thesis is 460 sustainability reports for 2009, taken from 44 diverse countries. These reports are obtained from the Global Reporting Initiatives (GRI) website. Sustainability reports are chosen as the focus because they provide more comprehensive information about sustainability than annual reports do. Thus, this thesis captures and analyzes the extent of companies' communication of sustainability information in their reports from a thoroughly global perspective.

The dependent variable of this thesis is the extent of corporate social responsibility disclosure, measured by a dichotomous equally weighted index based upon 79 key GRI checklist items. Descriptive analysis, univariate analysis and multivariate regression tests are employed to examine the relationship between dependent, independent, and control variables.

7.1 The Main Findings

Table 7.1 presents the key research questions and important findings about the extent of corporate social responsibility disclosure (CSRD) practices, based on the results of the analyses in Chapters 4 and 5.

Table 7.1 Summary: Thesis Findings

Research Questions	Thesis Findings	Relevant Thesis Section
What is the extent of CSRD across the sample?	Overall the extent of CSRD is 56.8%. The highest disclosed theme by companies is labour practices and decent works (66.4%), followed by economic (60.2%), society (57.1%), environmental (56.8%), human rights (49.0%), and product responsibility (46.0%) themes.	4.2
What company characteristic, the presence of a voluntary assurance statement, institutional, and internal factors explain CSRD communication?	Four statistically significant predictor variables explain the extent of CSRD: industry type, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee..	5.4

The results of this study indicate that the level of corporate social responsibility disclosure (CSRD) is moderate (56.8 percent). In order of most- to least-reported the six CSRD themes are as follows: labour practices (66.4 percent), followed by economic (60.2 percent), society (57.1 percent), environmental (56.8 percent), human rights (49.0 percent), and product responsibility themes (46.0 percent) respectively (see Table 4.2 and Figure 4.1).

This thesis does not find any statistical relationship between firm size and the extent of corporate social responsibility disclosure (see Table 5.8).

This finding differs from most prior studies. The reason for this statistically insignificant result may be that the sample of this thesis is dominated by very large global companies. The result suggests that the size of these very large companies is insufficiently different from each other to affect their level of corporate social responsibility disclosure. Hence, hypothesis 1 is rejected.

The industry type and the presence of a voluntary assurance statement are found to be key predictors in explaining the extent of CSRD (see Table 5.8). High-profile industries are more likely to produce CSRD communication. Legitimacy theory posits that this is in order to improve their accountability and visibility. The companies that have a voluntary assurance statement in their sustainability reports also provide higher corporate social responsibility disclosure. Legitimacy theory tenets explain that this is to increase stakeholder and user confidence in the quality, clarity, and reliability of the corporate social responsibility information. Hypotheses 2 and 3 are therefore accepted.

The extent of corporate social responsibility disclosure communication is also influenced by the jurisdictional business systems and the presence of a CSR committee (see Table 5.8). More specifically, companies from the emerging market jurisdiction have the highest CSRD followed by communitarian and Anglo-American countries. This may reflect a changing world order. Companies in emerging market countries may now be placing greater emphasis on CSRD to better address stakeholder groups' expectations, in order to attract more global capital and build successful business images. This thesis also finds that the presence of a CSR committee affects the extent of CSRD. The impact of such a committee suggests that it is seen as an effective monitoring device that prompts companies to demonstrate greater accountability, commitment and

transparency in corporate social responsibility disclosure. Consequently, Hypotheses 4 and 5 are accepted.

7.2 Contributions of Thesis

There are several key contributions of this thesis. First, the findings of the thesis support the use of legitimacy theory to interpret and explain companies' motivations for providing corporate social responsibility disclosure (CSRD). Using legitimacy theory, this thesis provides insights into why companies which may significantly effect their communities and multiple stakeholders demonstrate greater accountability and transparency by increasing CSRD to better meet stakeholders' expectations.

Second, this thesis provides insights into the corporate social responsibility disclosure practices of 460 companies around the world. By using such a rich data set 44 diverse countries with different jurisdictional business systems, this thesis captures current global corporate social responsibility disclosure practices, rather than merely looking at the CSRD of companies in a single jurisdiction.

Third, this thesis explores the role of additional voluntary assurance reports and their influence on the perceived credibility of sustainability reports. It also examines the presence of a CSR committee, a variable that has rarely been investigated in previous studies. The result of the thesis shows that the presence of a voluntary assurance statement in sustainability reports affects the extent of corporate social responsibility disclosure. Companies seem to adopt assurance services to enhance the quality of disclosure in sustainability reports. The thesis's findings also suggest that the presence of a CSR committee is an effective monitoring device for controlling the extent to which companies disclose CSRD for stakeholder groups.

A further contribution of this thesis is the identification of sustainability reports as a valuable source for capturing and analysing the corporate social responsibility (CSR) information. The thesis also contributes to a fuller comprehension of the details companies provide in sustainability reports. The results of this thesis indicate that the extent of CSRD in sustainability reports is moderate with just over half of the GRI recommended items communicated on average.

Finally, this thesis focuses on important themes of CSR, whereas, most of the previous studies of corporate social responsibility disclosure measure only specific themes. Six dimensions of CSR are measured in this thesis, namely economic, environmental, labour practices and decent work, human rights, society, and product responsibility. A focus on only one or some themes of corporate social responsibility disclosure is not sufficient as stakeholder groups require comprehensive information about company's interactions with communities, employees, customers, government, and the public. By exploring the whole set of CSRD issues, this study provides better insights into the key CSR dimensions that are communicated by large companies.

7.3 Future Research Suggestions

Several limitations to this thesis need to be noted. This thesis has taken a cross-sectional approach in measuring the extent of corporate social responsibility disclosure practices. Below are some suggestions for future research. First, further understanding of CSRD could be obtained by using a longitudinal data set. A longitudinal study could capture the changes of companies' economic performance in different economic conditions over time and the impact these changes have on corporate social responsibility disclosure practices.

Second, other more qualitatively-oriented research techniques could be employed to obtain interview and focus group style data from key senior corporate managers. Such techniques could obtain valuable evidence about the constraints and incentives of these managers to communicate social information. Such qualitative techniques could gain an in-depth understanding of the motivations underlying company managers' decisions about whether or not to communicate corporate social responsibility disclosure.

Third, further investigation is recommended to consider other mediums of reporting, such as companies' websites. Due to the rapid change in internet reporting around the world, it is suggested that future studies examine corporate social responsibility disclosure via website analysis.

Fourth, this study could be expanded by exploring corporate social responsibility disclosure in other settings, such as private companies, public sector bodies, not-for-profits, or non-government organisations (NGOs). Cormier and Gordon (2001) argue that ownership type is a key variable affecting the prevalence of CSRD. Publicly owned firms may or may not face greater pressures to disclose CSR than privately owned firms or NGOs, due to higher visibility and accountability expectations from large stakeholders. Examining the extent of CSRD of public and other entities, would offer a broader basis for testing legitimacy theory in differently structured entities.

Fifth, the findings in this thesis indicate that firm size, which was measured by number of employees and total assets is not a predictor of the extent of corporate social responsibility disclosure. Future studies need to consider different or better measures of firm visibility when using a global data base. An example would be relative size (i.e. market capitalization divided

by total market capitalization of country stock exchange), which may be a better measure for firm visibility for international studies.

Finally, this thesis could be extended by further analysing the influence of other predictor variables, such as media pressure, on corporate social responsibility disclosure practices. Islam and Deegan (2010) note that the media influences community concerns and CSRD practice.

7.4 Concluding Remarks

This thesis explores corporate social responsibility issues by generating important large-scale evidence about contemporary corporate social responsibility disclosure practices. It also examines factors that influence disclosures in 460 globally prominent companies across 44 diverse countries. Unlike the majority of past studies, which have focused solely on annual reports, this thesis uses the more contemporary stand-alone sustainability reports as the media to provide a better understanding of sustainability information.

The findings of this thesis have made a significant contribution to the literature in several ways. First, the results of the thesis supports the application of legitimacy theory to interpret the motivations of large global companies for providing corporate social responsibility disclosure. Second, type of industry, the presence of a voluntary assurance statement, jurisdictional business systems, and the presence of a CSR committee are given as important explanatory factors that influence the extent of corporate social responsibility disclosure.

The above variables are powerful predictors of the motivations of global companies to provide corporate social responsibility disclosure (CSRD). For instance, this thesis more closely investigates the importance of jurisdictional business systems as a determinant of the extent of CSRD

practices. The findings are mostly consistent with previous studies. However, important new insights regarding the prominence of emerging market companies are uncovered. Also highlighted are the notable influence on CSRD of voluntary assurance and the presence of a CSR committee.

Overall, the empirical findings of this thesis contribute valuable further development of insights into corporate social responsibility disclosure practices. They make possible for the community and the business and accounting professions a better understanding of CSR communication. The findings of this thesis can also be used to inform policies that motivate companies to disclose more corporate social responsibility information worldwide.

REFERENCES

- Adams, C.A. 2002. Internal organisational factors influencing corporate social and ethical reporting: Beyond current theorising. *Accounting, Auditing and Accountability Journal* 15 (2): 223-250.
- Adams, C.A., W. Hill, and C.B. Roberts. 1998. Corporate social reporting practices in Western Europe: legitimating corporate behaviour? *The British Accounting Review* 30 (1):1-21.
- Adams, C.A., and N. Kuasirikun. 2000. A comparative analysis of corporate reporting on ethical issues by UK and German chemical and pharmaceutical companies. *European Accounting Review* 9 (1): 53-79.
- Adams, C.A., and A. Zutshi. 2004. Corporate social responsibility: Why business should act responsibly and be accountable. *Australian Accounting Review* 14 (3): 31-39.
- Adams, C.A., and G.R. Frost. 2007. Managing social and environmental performance: Do companies have adequate information? *Australian Accounting Review* 17 (3): 2-11.
- Aerts, W., D. Cormier, and M. Magnan. 2006. Intra-industry imitation in corporate environmental reporting: An international perspective. *Journal of Accounting and Public Policy* 25 (3): 299-331.
- Aerts, W., and D. Cormier. 2009. Media legitimacy and corporate environmental communication. *Accounting, Organizations and Society* 34 (1): 1-27.
- Ahmad, N.N.N., and M. Sulaiman. 2004. Environmental disclosures in Malaysian annual reports: A legitimacy theory perspectives. *International Journal of Commerce and Management* 14 (1): 44-58.
- Al-Tuwaijiri, S.A., T.E. Christensen, and K.E. Hughes II. The relations among environmental performance, and economic performance: A simultaneous equation approach. *Accounting, Organizations and Society* 29 (5-6): 447-471.
- Amran, A., and S.S. Devi. 2007. Corporate social reporting in Malaysia: A political theory perspectives. *Malaysian Accounting Review* 6 (1): 19-44.

- Amran, A., and R. Haniffa. 2011. Evidence on development of sustainability reporting: A case of a developing country. *Business Strategy and Environment* 20 (3): 141-156.
- Amran, A., V. Periasamy, and A.H. Zulkafli. 2011. Determinants of climate change disclosure by developed and emerging countries in Asia Pacific. *Sustainable Development* (forthcoming).
- Andrew, B.H., F.A. Gul., J.E. Guthrie, and H.Y. Teoh. 1989. A note on corporate social disclosure practices in developing countries: The case of Malaysia and Singapore. *The British Accounting Review* 21 (4): 371-376.
- Archel, P., J. Husillos., C. Larrinaga, and C. Spence. 2009. Social disclosure, legitimacy theory and the role of the state. *Accounting, Auditing and Accountability Journal* 22 (8): 1284-1307.
- Azim, M., S. Ahmad, and M.S. Islam. 2009. Corporate social responsibility reporting: Illustrations from less-developed country. *Journal of the Asia-Pacific Centre for Environmental Accountability* 15 (1): 2-12.
- Ballaou, B., D.L. Heitger, and C.E. Landes. 2006. The future of corporate sustainability reporting. *Journal of Accountancy* 202 (December): 65-74.
- Baughn, C.C., N.L. Bodie and J.C. McIntosh. 2007. Corporate social and environmental responsibility in Asian countries and other geographical regions. *Corporate Social Responsibility and Environmental Management* 14 (4): 189-205.
- Bebbington, J., C. Larrinaga and J.M. Moneva. 2008. Corporate social reporting and reputation risk management. *Accounting, Auditing and Accountability Journal* 21 (3): 337-361.
- Bebbington, J., C. Higgins, and B. Frame. 2009. Initiating sustainability development reporting: Evidence from New Zealand. *Accounting, Auditing and Accountability Journal* 22 (4): 588-625.
- Belal, A.R. 2001. A study of corporate social disclosures in Bangladesh. *Managerial Auditing Journal* 16 (5): 274-259.
- Belal, A.R., and S. Cooper. 2011. The absence of corporate social responsibility reporting in Bangladesh. *Critical Perspectives on Accounting* 22 (7): 654-667.

- Belkaoui, A., and P.G. Karpik. 1989. Determinants of the corporate decision to disclose social information. *Accounting, Auditing and Accountability Journal* 2 (1): 36-51.
- Bouten, L., P. Everaert, L. Van Liedekerke, L. De Moor, and J. Christiaens. 2011. Corporate social responsibility reporting: A comprehensive picture? *Accounting Forum* 35 (3): 187-204.
- Brammer, S., and S. Pavellin. 2008. Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment* 17 (2): 120-136.
- Branco, M.C., and L.L. Rodrigues. 2006. Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics* 69 (2): 111-132.
- Branco, M.C., and L.L. Rodrigues. 2008. Social responsibility disclosure: A study of proxies for the public visibility of Portuguese banks. *The British Accounting Review* 40 (2): 161-181.
- Branco, M.C., and L.L. Rodrigues. 2008a. Factors influencing social responsibility disclosure by Portuguese companies. *Journal of Business Ethics* 83 (4): 685-701.
- Brown, A.M., G. Tower., and R. Taplin. 2005. Human resources disclosures in the annual reports of Pacific Island countries' entities. *Asia Pacific Journal of Human Resources* 43 (2): 252-272.
- Brown, N., and C. Deegan. 1998. The public disclosure of environmental performance information-a dual test of media agenda setting theory and legitimacy theory. *Accounting and Business Research* 29 (1): 21-41.
- Buhr, N., and M. Freedman. 2001. Culture, institutional factors and differences in environmental disclosure between Canada and the United States. *Critical Perspectives on Accounting* 12 (3): 293-322.
- Cahaya, F.R. 2006. *Social Disclosure Practices of JSX Listed Entities*. Master Thesis, School of Accounting, Curtin University, Perth, Australia.
- Cahaya, F.R., S.A. Porter, and A.M. Brown. 2008. Social disclosure practices by Jakarta stock exchange listed entities. *Journal of the Asia-Pacific Center for Environmental Accountability* 14 (1): 2-11.

- Cahaya, F.R., S.A. Porter, G. Tower, and A.M. Brown. 2011. Indonesia's low concern labour issues. *Social Responsibility Journal* 8 (1): 114-132.
- Campbell, D. 2003. Intra and intersectoral effects in environmental disclosures: evidence for legitimacy theory? *Business Strategy and the Environment* 12 (6): 357-371.
- Campbell, D., G. Moore, and P. Shrivess. 2006. Cross-sectional effect in community disclosure. *Accounting, Auditing and Accountability Journal* 19 (1): 96-114.
- Campbell, J.L. 2006. Institutional analysis and the paradox of corporate social responsibility. *American Behavioral Scientist* 49 (7): 925-938.
- Carson, D., A. Gilmore, C. Perry, and K. Gronhaug. (2001). Qualitative marketing research: Philosophy of research. In *Sage Research Methods*, 1-23. London: Sage Publications, Inc
- Chapple, W., and J. Moon. 2005. Corporate social responsibility (CSR) in Asia. *Business and Society* 44 (4): 414-441.
- Chen, S., and P. Bouvin. 2009. Is corporate responsibility converging? A comparison of corporate responsibility reporting in the USA, UK, Australia, and Germany. *Journal of Business Ethics* 87 (Supplement 1): 299-317.
- Cheung, Y.L., W. Tan, H.J. Ahn, and Z. Zhang. 2010. Does corporate social responsibility matter in Asian emerging market? *Journal of Business Ethics* 92 (3): 401-413.
- Cho, C. H., and D. M. Patten. 2007. The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations and Society* 32 (7-8): 639-647.
- Christopher, T., and M. Filipovic. 2008. The extent and determinants of disclosure of Global Reporting Initiative guidelines: Australian evidence. *The Journal of Contemporary Issues in Business and Government* 14 (2): 17-40.
- Clarkson, P.M., Y. Li, G.D. Richardson, and F.P. Vasvari. 2008. Revisiting the relation between environmental performance disclosure: An empirical analysis. *Accounting Organizations and Society* 33 (4-5): 303-327.

- Coakes, S.J. 2009. *SPSS: Analysis without anguish using SPSS version 14.0 for window*. New York, NY, USA: John Wiley & Sons, Inc.
- Coetzee , C.M., and J.C. Van Staden. 2011. Disclosure responses to mining accidents: South African evidence. *Accounting Forum* 35 (4): 232-246.
- Cooke, T.E. 1991. An assessment of voluntary disclosure in the annual reports of Japanese corporations. *The International Journal of Accounting* 26 (3): 147-189.
- Cooper S.M., and D.L. Owen. 2007 Corporate social reporting and stakeholder accountability: The missing link. *Accounting Organizations and Society* 32 (7-8): 649-667.
- Cormier, D., and I. M. Gordon. 2001. An examination of social and environmental reporting strategies. *Accounting, Auditing and Accountability Journal* 14 (5): 587-616.
- Cormier, D., M. Magnan, and B. Van Velthoven. 2005. Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions? *European Accounting Review* 14 (1): 3-39.
- Cormier, D., and M. Magnan. 2003. Environmental reporting management: A continental European perspective. *Journal of Accounting and Public Policy* 22 (1): 43-62.
- CorporateRegister. 2009. Corporate register reporting award: Global winner and reporting trends. <http://www.corporateregister.com> (accessed September 11, 2011).
- Cowan, S., and C. Deegan. 2011. Corporate disclosure reactions to Australia's first national emission reporting scheme. *Accounting and Finance* 51 (2): 409-436.
- Cowen, S.S., L.B. Ferreri, and L.D. Parker. 1987. The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis. *Accounting, Organizations and Society* 12 (2): 111-122.
- Coy, D., G. Tower, and K. Dixon. 1983. Quantifying the quality of tertiary education annual reports. *Accounting and Finance* 33 (2): 121-130.
- Da Silva Monteiro, S.M., and B. Aibar-Guzman. 2010. Determinants of environmental disclosure in the annual reports of large companies

- operating in Portugal. *Corporate Social Responsibility and Environmental Management* 17 (4): 185-204.
- Deegan, C. 2002. The legitimising effect of social and environmental disclosures—a theoretical foundation. *Accounting, Auditing, and Accountability Journal* 15(3): 282-311.
- Deegan, C. 2006. *Financial accounting theory*. 2nd Edition. North Ryde. New South Wales, Australia: McGraw Hill.
- Deegan, C. 2007. Organisational legitimacy as a motive for sustainability reporting. In *Sustainability Accounting and Accountability*, 1st Edition. 127-149. Ed, J. Unnerman, J. Bebbington, and B. O'Dwyer. New York, NY: Routledge.
- Deegan, C., and B. Gordon. 1996. A study of the environmental disclosure practices of Australian corporations. *Accounting and Business Research* 26 (3): 187-199.
- Deegan, C., and M. Rankin. 1996. Do Australian companies report environmental news objectively? An analysis of environmental disclosures by firms prosecuted by the environmental protection authority. *Accounting, Auditing and Accountability Journal* 9 (2): 52-69.
- Deegan, C., M. Rankin, and P. Voght. 2000. Firms' disclosure reactions to major social incidents: Australian evidence. *Accounting Forum* 24 (1): 101-130.
- Deegan, C., M. Rankin, and J. Tobin. 2002. An examination of the corporate social and environmental disclosures of BHP from 1983-1997: A test of legitimacy theory. *Accounting, Auditing, and Accountability Journal* 15 (3): 312-343.
- Deegan, C., B.J. Cooper, and M. Shelly. 2006. An investigation of TBL report assurance statement: UK and European evidence. *Managerial Auditing Journal* 21 (4): 329-371.
- Dilling, P.F.A. 2010. Sustainability reporting in a global context: What are the characteristics of corporations that provide high quality sustainability reports-An empirical analysis. *International Business and Economic Research Journal* 9 (1): 19-30.
- Dominguez, A.A. 2011. The impact of human resource disclosure on corporate image. *Journal of Human Resource Costing and Accounting* 15 (4): 279-298.

- Dowling, J., and J. Pfeffer. 1975. Organizational legitimacy: Social values and organizational behaviour. *Pacific Sociological Review* 18 (1): 122-136.
- Eldomiaty, T.I., C.J. Choi, and P. Cheng. 2006. Global corporate governance: Emerging market and strategic transparency in a triad framework. *Asia Pacific Journal Economic and Business* 10 (1): 48-61.
- Eljido-Ten, E. 2007. Applying stakeholder theory to analyse corporate environmental performance. *Asian Review of Accounting* 15 (2): 164-184.
- Faisal, F., G. Tower, and R. Rusmin. 2012a. Legitimising corporate sustainability reporting throughout the world. *Australasian Accounting Business and Finance* 6 (2): 19-34.
- Faisal, F., G. Tower, and R. Rusmin. 2012b. Communicating key labour issues in a global context. *Journal Human Resource Costing and Accounting* 16 (4): 320-340.
- Fekrat, M.A., C. Inclan, and D. Petroni. 1996. Corporate environmental disclosure: Competitive disclosure hypothesis using 1991 annual report data. *The International Journal of Accounting* 31 (2): 175-195.
- Frost, G., S. Jones, J. Loftus, and S. Van Der Laan. 2005. A survey of sustainability reporting practices of Australian reporting entities. *Australian Accounting Review* 15 (1): 89-96.
- Fuentes-Garcia, F.J., J.M Nunez-Tabales, and R. Veroz-Herradon. 2008. Applicability of corporate social responsibility to human resources management: Perspective from Spain. *Journal of Business Ethics* 82 (1): 27-44.
- Fukukawa, K. 2010. *Corporate social responsibility in Asia*. New York, NY: Routledge.
- Gamble, G.O., K. Hsu, C. Jackson, and C.D. Tollerson. 1996. Environmental disclosures in annual reports: An international perspectives. *The International Journal of Accounting* 31 (3): 293-331.

- Gao, S.S., S. Heravi, and J. Z. Xiao. 2005. Determinants of social and environmental reporting in Hong Kong: A research note. *Accounting Forum* 29 (2): 232-242.
- Garcia-Sanchez, I. M. 2008. Corporate social reporting: Segmentation and characterization of Spanish companies. *Corporate Social Responsibility and Environmental Management* 15 (4): 187-198.
- Ghazali, N.A.M. 2007. Ownership structure and corporate social responsibility disclosure: some Malaysian evidence. *Corporate Governance* 7 (3): 251-266.
- Ghozali, I. 2007. *Aplikasi Analisis Multivariate dengan Program SPSS*. Edisi 4. Semarang, Indonesia: Badan Penerbit Universitas Diponegoro.
- Global Reporting Initiative. 2006. *Sustainability reporting guidelines*. Amsterdam: GRI. <http://www.globalreporting.org> (accessed September 28, 2009).
- Global Reporting Initiative. 2010. *Carrot and sticks promoting transparency and sustainability*. Amsterdam: GRI. <https://www.globalreporting.org/resource/library/Carrots-And-Sticks-Promoting-Transparency-And-Sustainability.pdf> (accessed September 1, 2010).
- Godfrey, P.C., and N. Hatch. 2007. Researching corporate social responsibility: An agenda for the 21st century. *Journal of Business Ethics* 70(1): 87-98.
- Gray, R. 2000. Current developments and trends in social and environmental auditing, reporting, and attestation: A review and comment. *International Journal of Auditing* 4 (3): 247-268.
- Gray, R., D. Owen, and K.T. Maunders. 1987. *Corporate social reporting: Accounting and accountability*. Englewood Cliffs, New Jersey: Prentice Hall International.
- Gray, R., D. Owen, and C. Adams. 1996. *Accounting and accountability: Changes and challenges in corporate social and environmental reporting*. London: Prentice Hall.
- Gray, R., R. Kouhy, and S. Lavers. 1995. Corporate social and environmental reporting: A review of the literature and a longitudinal

- study of UK disclosure. *Accounting, Auditing and Accountability Journal* 8 (2): 47-77.
- Gray, R., M. Javad, D.M. Power, and C.D. Sinclair. 2001. Social and environmental disclosure and corporate characteristics: A research note and extension. *Journal of Business Finance and Accounting* 28 (3-4): 327-356.
- Guba, E.G., and Y.S. Lincoln. 1994. Competing paradigms in qualitative research. In Denzin and Y.S. Lincoln. *Handbook of qualitative research*. 105-117. Thousands Oaks, California: Sage Publications.
- Gunawan, J. 2010. Perceptions of important information in corporate social disclosures: Evidence from Indonesia. *Social Responsibility Journal* 6 (1): 62-71.
- Gunawan, J., H. Djajadikerta, and M. Smith. 2009. An examination of corporate social disclosures in the annual reports of Indonesian listed companies. *Journal of the Asia-Pacific Centre for Environmental Accountability* 15 (1): 13-36.
- Guthrie, J., and L.D. Parker. 1989. Corporate social reporting: A rebuttal of legitimacy theory. *Accounting and Business Research* 19 (76): 343-352.
- Guthrie, J., and L.D. Parker. 1990. Corporate social disclosure practice: A comparative international analysis. *Advances in Public Interest Accounting* 3: 159-176.
- Gujarati, D.N. 2004. *Basic Econometrics*. 4th Edition. New York, NY: McGraw-Hill.
- Hackston, D., and M.J. Milne. 1996. Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing and Accountability Journal* 9 (1): 77-108.
- Hair, J.F., W.C. Black, B.J. Babin, and R.E. Anderson. 2009. *Multivariate data analysis* 7th Edition. Upper Saddle River, N.J. : Pearson Prentice Hall.
- Halme, M., and M. Huse. 1997. The influence of corporate governance, industry and country factors of environmental reporting. *Scandinavia Journal Management* 13 (2): 137-157.
- Hamman, R., P. Sinha, F. Kapfudzaruwa, and C. Schild. 2009. Business and human rights in South Africa: An analysis of antecedents of

- human rights due diligence. *Journal of Business Ethics* 87 (2): 453-473.
- Haniffa, R.M., and T.E. Cooke. 2005. The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy* 24 (5): 391-430.
- Ho, L.C.J., and M. E. Taylor. 2007. An empirical analysis of Triple-Bottom-Line Reporting and its determinants: evidence from the United States and Japan. *Journal of International Financial Management and Accounting* 18 (2): 123-150.
- Holder-Webb, L., J. R. Cohen, L. Nath, and D. Wood. 2009. The supply of corporate social responsibility disclosures among U.S. firms. *Journal of Business Ethics* 84 (4): 497-527.
- Hope, O.K. 2003. Firm-level disclosures and the relative roles of culture and legal origin. *Journal of International Financial Management and Accounting* 14 (3): 218-248.
- Ho, P.L. 2009. *Determinants of voluntary disclosure by Malaysian listed companies over time*. PhD Thesis, Curtin University, Australia.
- Holland, L., and Y.B. Foo. 2003. Differences in environmental reporting practices in the UK and the US: The legal and regulatory context. *The British Accounting Review* 35 (1): 1-18.
- Hossain, M.A., M.K.S. Islam, and J. Andrew. 2006. Corporate social and environmental disclosures in developing countries: Evidence from Bangladesh. <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1194&context=commpapers> (accessed September 16, 2011).
- Islam, M.A., and C. Deegan. 2008. Deegan. Motivations for an organisation within a developing country to report social responsibility information: Evidence from Bangladesh. *Accounting, Auditing and Accountability Journal* 21(6): 850-874.
- Islam, M.A., and C. Deegan. 2010. Media pressures and corporate disclosure of social responsibility performance information: A study of two global clothing and sports retail companies. *Accounting and Business Research* 40 (2): 131-148.
- Joseph, C., and R. Taplin. 2011. The measurement of sustainability disclosure: Abundance versus occurrence. *Accounting Forum* 35 (1): 19-31.

- Joshi, P.L., and S.S. Gao. 2009. Multinational corporations' corporate social and environmental disclosures (CSED) on websites. *International Journal of Commerce and Management* 19 (1): 27-44.
- Kent, P., and R. Monem. 2008. What drives TBL reporting: Good governance or threat legitimacy? *Australian Accounting Review* 18 (4): 297-309.
- Konrad, A., R. Steurer, M.E. Langer, and A. Martinuzzi. 2006. Empirical findings on business-society relations in Europe. *Journal of Business Ethics* 63 (1): 89-105.
- Kolk, A., D. Levy, and J. Pinkse. 2008. Corporate responses in an emerging climate regime: The institutionalization and commensuration of carbon disclosure. *European Accounting Review* 17 (4): 719-745.
- Kolk, A., and P. Perego. 2010. Determinants of the adoption of sustainability assurance statements: An international investigation. *Business Strategy and the Environment* 19 (3): 182-198.
- KPMG. 2008. *KPMG international survey of corporate sustainability reporting* 2008. <http://www.kpmg.com/global/en/issuesandinsights/articlespublications/pages/sustainability-corporate-responsibility-reporting-2008.aspx> (accessed February 9, 2010).
- Kuasirikun, N., and M. Sherer. 2004. Corporate social accounting disclosure in Thailand. *Accounting, Auditing and Accountability Journal* 17 (4): 629-660.
- Lahteenmaki, S., and M. Laiho. 2011. Global HRM and the dilemma of competing stakeholder interests. *Social Responsibility Journal* 7 (2): 166-180.
- Li, N., A. Toppinen, A. Tuppuru, K. Puumalainen, and M. Hujala. 2011. Determinants of sustainability disclosure in the global forest industry. *Electronic Journal of Business Ethics and Organizations Studies* 16 (1): 33-40.
- Lindblom, C.K. 1994. The implications of organizational legitimacy for corporate social performance and disclosure, paper presented at *Critical Perspectives on Accounting Conference*, New York, NY.

- Lines, V.L. 2004. Corporate reputation in Asia: Looking beyond bottom-line performance. *Journal of Communication Management* 8 (3): 233-245.
- Liu, X., and V. Anbumozhi .2009. Determinant factors of corporate environmental information disclosure: An empirical study of Chinese listed companies. *Journal of Cleaner Production* 17 (6): 593-600.
- Lopez, M.V., A. Garcia, and L. Rodriguez. 2007. Sustainable development and corporate performance: A study based on the Dow Jones sustainability index. *Journal of Business Ethics* 75 (3): 285-300.
- Lozano, J.M. and M. Prandi. 2005. Corporate Social Responsibility and Human Rights. In *Corporate Social Responsibility: The corporate governance of the 21st century*. Ed. Ramon Mullerat. 183-203. Netherlands: International Bar Association.
- Lynch, B. 2010. An examination of environmental reporting by Australian state government departments. *Accounting Forum* 34 (1): 32-45.
- Lynn, M. 1992. A note on corporate social disclosure in Hong Kong. *The British Accounting Review* 24 (2): 105-110.
- Magness, V. 2006. Strategic posture, financial performance and environmental disclosure: An empirical test of legitimacy theory. *Accounting, Auditing and Accountability Journal* 19 (4): 540-563.
- Mahadeo, J.D., and V.O. Hanuman, and T. Soobaroyen. 2011. Changes in social and environmental reporting practices in an emerging economy (2004-2007): Exploring the relevance of stakeholder and legitimacy theories. *Accounting Forum* 35 (3): 158-175.
- Maignan, I., and D.A. Ralston. 2002. Corporate social responsibility in Europe and the U.S: Insights from business' self-presentations. *Journal of International Business Studies* 33 (3): 497-514.
- Mallin, C.A., and G. Michelon. 2011. Board reputation attributes a corporate social performance: An empirical investigation of the US best corporate citizens. *Accounting and Business Research* 41 (2): 119-144.
- Mangos, N.C., and N.R. Lewis. 1995. A socio-economic paradigm for analysing managers' accounting choice behaviour. *Accounting, Auditing and Accountability Journal* 8 (1): 38-62.

- Marston, C. L., and P. J. Shrives. 1991. The use of disclosure indices in accounting research: A review article. *British Accounting Review* 23 (3): 195-210.
- Meek, G.K., C.B. Roberts, and S.J. Gray. 1995. Factors influencing voluntary annual report disclosure by the U.S, U.K, and Continental European multinational corporation. *Journal of International Business Studies* 26 (3): 555-572.
- Michelon, G., and A. Parbonetti. 2012. The effect of corporate governance on sustainability disclosure. *Journal of Management and Governance* 16 (3): 477-509.
- Millar, C. C. J. M., T. I. Eldomiaty, C.J. Choi, and B. Hilton. 2005. Corporate governance and institutional transparency in emerging markets. *Journal Business Ethics* 59 (1-2): 163-174.
- Moneva, J.M., and F. Llana. 2000. Environmental disclosures in the annual reports of large companies in Spain. *European Accounting Review* 9 (1): 7-29.
- Morhardt, J.E. 2010. Corporate social responsibility and sustainability reporting on the internet. *Business Strategy and Environment* 19 (7): 436-452.
- Moroney, R., C. Windsor, and Y.T. Aw. 2011. Evidence of assurance enhancing the quality of voluntary environmental disclosures: an empirical analysis. *Accounting and Finance*. Wiley Online Library. <http://onlinelibrary.wiley.com.dbgw.lis.curtin.edu.au/doi/10.1111/j.1467629X.2011.00413.x/abstract;jsessionid=7460E013C6E8D24A6CD2499AB6D4A537.d03t01> (accessed May 23, 2011).
- Naser, K., A. Al-Hussaini, D. Al-Kwari, and R. Nuseibeh. 2006. Determinants of corporate social disclosure in developing countries: The case of Qatar. *Advances in International Accounting* 19: 1-23.
- Ness, K.E., and A.M. Mirza. 1991. Corporate social disclosure: A note on a test of agency theory. *The British Accounting Review* 23 (3): 211-217.
- Neu, D., H. Warsame, and K. Pedwell. 1998. Managing public impressions: Environmental disclosures in annual reports. *Accounting, Organizations and Society* 23 (3): 265-282.
- Neuman, W.L. 2006. *Social research method: qualitative and quantitative approaches*. 6th Edition. Boston, Mass: Pearson/Allyn & Bacon.

- Newson, M., and C. Deegan. 2002. Global expectations and their association with corporate social disclosure practices in Australia, Singapore and South Korea. *The International Journal of Accounting* 37 (2): 183-213.
- Nurhayati, R., A.M. Brown, and G. Tower. 2006. Understanding the level of natural environment disclosures by Indonesian listed companies. *Journal of the Asia Pacific Center for Environmental Accountability* 12 (3): 4-11.
- O'Donovan, G. 2002. Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory. *Accounting, Auditing and Accountability Journal* 15 (3): 344-371.
- O'Dwyer, B. 2002. Managerial perceptions of corporate social disclosure: An Irish story. *Accounting, Auditing and Accountability Journal* 15 (3): 406-436.
- Orij, R. 2010. Corporate social disclosure in the context of national cultures and stakeholder theory. *Accounting, Auditing and Accountability Journal* 23 (7): 868-889.
- Park, J., and T. Brorson. 2005. Experiences of and views on third-party assurance of corporate environmental and sustainability reports. *Journal of Cleaner Production* 13 (10-11): 1095–1106.
- Patten, D.M. 1991. Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public Policy* 10 (4): 297-308.
- Patten, D. M. 1992. Intra-industry environmental disclosures in response to the Alaskan oil spill: A note on legitimacy theory. *Accounting, Organizations and Society* 17 (5): 471-475.
- Patten, D. 2002. Media exposure, public policy pressure, and environmental disclosure: An examination of the impact of tri data availability. *Accounting Forum* 26 (2): 153-171.
- Perego, P. 2009. Causes and consequences of choosing different assurance providers: An international study of sustainability reporting. *International Journal of Management* 26 (3): 412-425.
- Peter, S., M. Miller, and S. Kusyk. 2011. How relevant is corporate governance and corporate social responsibility in emerging markets? *Corporate Governance* 11 (4): 429-445.

- Pratten, J. D., and A.A. Mashat. (2009), Corporate social disclosure in Libya. *Social Responsibility Journal* 5 (3): 311-327.
- Rahaman, A.S., S. Lawrence, and J. Roper. 2004. Social and environmental reporting at the VRA: Institutionalised legitimacy or legitimization crisis? *Critical Perspective on Accounting* 15 (1): 35-56.
- Rankin, M., C. Windsor, D. Wahyuni. 2011. An investigation of voluntary corporate greenhouse gas emissions reporting in a market governance system: Australian evidence. *Accounting, Auditing and Accountability Journal* 24 (8): 1037-1070.
- Reverte, C. 2009. Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics* 88 (2): 351-366.
- Roberts, R.W. 1992. Determinants of corporate social responsibility disclosure: An application of stakeholder theory. *Accounting, Organizations and Society* 17 (6): 595-612.
- Social Accountability. 2008. *Social Accountability 8000*.
<http://www.saintl.org/index.cfm?fuseaction=Page.viewPage&pageId=937&parentID=479&nodeID=1> (accessed October 23, 2010).
- Said, R., Y.H. Zainuddin, and H. Haron. 2009. The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. *Social Responsibility Journal* 5 (2): 212-226.
- Sawani, Y., M.M. Zain, and F. Darus. 2010. Preliminary insights on sustainability reporting and assurance practices in Malaysia. *Social Responsibility Journal* 6 (4): 627-645.
- Simnett, R., A. Vanstraelen, and W.F. Chua. 2009. Assurance on sustainability reports: An international comparison. *The Accounting Review* 84 (3): 937-967.
- Smith, M., K. Yahya, and A.M. Amiruddin. 2007. Environmental disclosure and performance reporting in Malaysia. *Asian Review of Accounting* 15 (2): 185-199.
- Spicer, B.H. 1978. Investor, corporate social performance, and information disclosure: An empirical study. *The Accounting Review* 53 (1) (Jan): 94-111.

- Spitzeck, H. 2009. The development of governance structures for corporate responsibility. *Corporate Governance* 9 (4): 495-505.
- Sousa, F.J. 2010. Metatheories in research: positivism, postmodernism and critical realism. In *Organizational Culture, Business-to-Business Relationships, and Interfirm Network Advances in Business Marketing and Purchasing* 16: 455–503.
- Subbarao, A.V., and D. Zeghal. 1997. Human resources information disclosure in annual reports: An international comparison. *Journal of Human Resource Costing and Accounting* 2 (2): 53-73.
- Suchman, M.C. 1995. Managing Legitimacy: Strategic and institutional approaches. *The Academy of Management Review* 20 (3): 571-610.
- Tabachnick, B.G., and L.S. Fidell. 2007. *Using multivariate statistics*. 5th Edition. Boston, MA: Pearson/Allyn & Bacon.
- Tashakkori, A., and C. Teddlie. 1998. *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, London: Sage Publications
- Teoh, H.Y., and G. Thong. 1984. Another look at corporate social responsibility and reporting: An empirical study in a developing country. *Accounting, Organizations and Society* 9 (2): 189-206.
- Tilling, M.V., and C.A. Tilt. 2010. The edge of legitimacy: Voluntary social and environmental reporting in Rothmans' 1956-1999 annual reports. *Accounting, Auditing, and Accountability Journal* 23 (1): 55-81.
- Tilt, C.A., and C.F. Symes. 1999. Environmental disclosure by Australian mining companies: Environmental conscience or commercial reality? *Accounting Forum* 23 (2): 137-154.
- Trotman, K.T., and G.W. Bradley. 1981. Associations between social responsibility disclosure and characteristics of companies. *Accounting, Organizations and Society* 6 (4): 355-362.
- Tsang, E.W.K. 1998. A longitudinal study of corporate social reporting in Singapore: The case of banking, food and beverages and hotel industries. *Accounting Auditing and Accountability Journal* 11 (5): 624-635.

- Tschopp, D.J. 2005. Corporate social responsibility: A comparison between the United States and the European Union. *Corporate Social Responsibility and Environmental Management* 12 (1): 55-59.
- Udayasankar, K. 2008. Corporate social responsibility and firm size. *Journal of Business Ethics* 83 (2): 167-175.
- Ullman, A.A. 1985. Data in search of a theory: A critical examination of the relationship among social performance, social disclosure, and economic performance of US firms. *Academy of Management Review* 10 (3): 540-557.
- Unerman, J. 2000. Methodological issues-reflections on quantification in corporate reporting content analysis. *Accounting, Auditing and Accountability Journal* 13 (5): 667-681.
- Unerman, J. 2008. Strategic reputation risk management and corporate social responsibility reporting. *Accounting Auditing and Accountability Journal* 21 (3): 362-364.
- Van der Laan Smith, J., A. Adhikari and R.H. Tondkar. 2005. Exploring differences in social disclosure internationally: A stakeholder perspective. *Journal of Accounting and Public Policy* 24 (2): 123-151.
- Van Marrewijk, M. 2003. Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics* 44 (2-3): 95-105.
- Van Staden, C.J., and J. Hooks. 2007. A comprehensive comparison of corporate environmental reporting and responsiveness. *The British Accounting Review* 39 (3): 197-210.
- Villiers, C.D., and C.J. Van Staden. 2006. Can less environmental disclosure have a legitimizing effect? Evidence from Africa. *Accounting, Organizations and Society* 31 (8): 763-781.
- Villiers, C.D., and C.J. Van Staden. 2010. Shareholders' requirements for corporate environmental disclosures: A cross country comparison. *The British Accounting Review* 42 (4): 227-240.
- Waddock, S. 2006. Rhetoric, reality and relevance for corporate citizenship: Building a bridge to actionable knowledge. In *Corporate Social Responsibility*, Volume 1, Ed. J. Allouche, 20-37. New York, NY: Plagrave McMillan.

- Wanderley, L.S.O., R. Lucian, F. Farache, J.M.D.S. Filho. 2008. CSR information disclosure on the web: A context-based approach analysing the influence of country of origin and industry sector. *Journal of Business Ethics* 82 (2): 369-378.
- Welford, R. 2005. Corporate social responsibility in Europe, North America and Asia. *The Journal of Corporate Citizenship* 17: 33-47.
- Williams, S.L.M. 1997. *Voluntary environmental and social accounting disclosure practices in the Asia Pacific Region*. PhD Thesis, Murdoch University, Australia.
- Williams, S.M. 1999. Voluntary environmental and social accounting disclosure practices in the Asia Pacific Region: An international empirical test of political economy theory. *The International Journal of Accounting* 34 (2): 209-238.
- Wilmshurst, T. D., and G. R. Frost. 2000. Corporate environmental reporting: A test of legitimacy theory. *Accounting, Auditing and Accountability Journal* 13 (1): 10-26.
- World Research Institute and International Finance Corporation. 2009. *Undisclosed Risk: Corporate Environmental and Social Reporting in Emerging Asia*. <http://www.wri.org/publication/undisclosed-risk-asia> (accessed December, 20 2011).
- Wouters, J., and L. Chanet . 2008. Corporate human rights responsibility: A European perspectives. *North Western Journal of International Human Rights* 6 (2): 262-303.
- Xiao, J.Z., S.S. Gao, S.Heravi and Y.C.Q. Cheung. 2005. The impact of social and economic development on corporate social and environmental disclosure in Hong Kong and the UK. *Advances in International Accounting* 18: 219-243.
- Zeghal, D., S. A. Ahmed. 1990. Comparison of social responsibility information disclosure media used by Canadian firms. *Accounting, Auditing and Accountability Journal* 3 (1): 38-53.

APPENDICES

Appendix A: Core and Additional Performance Indicators

As discussed in Chapter 4, Section 4.3 the GRI (2006) performance indicators consists of 79 indicators. These 79 indicators are further categorized into core and additional performance indicators. According to the GRI (2006), core performance indicators are assumed to be material for most organisations. An organisation should report core indicators unless they are deemed not material on the basis of the GRI Reporting Principles. Whereas, additional indicators represent emerging practice that may be material for some organisation, but are not necessarily material for others. Said differently core indicators are deemed to be essential items. Whereas, additional items may be less crucial. Table A.1 lists all the GRI core and additional indicators.

Table A.1 Core and Additional Performance Indicators*

ECONOMIC		
Category	GRI code	Indicator
Economic Performance	EC1-CORE	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.
	EC2-CORE	Financial implications and other risks, and opportunities for the organization's activities due to climate change.
	EC3-CORE	Coverage of the organization's defined benefit plan obligations.
	EC4-CORE	Significant financial assistance received from government.
Market Presence	EC5-ADD	Range of ratios of standard entry level of wage compare to local minimum wage at significant locations of operation.
	EC6-CORE	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.
	EC7-CORE	Procedures for local hiring and proportion of senior management hired from community at significant locations of operation.

Indirect Economic Impact	EC8-CORE	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro bono engagement.
	EC9-ADD	Understanding and describing significant indirect economic impacts, including the extent of impacts.
ENVIRONMENTAL		
Category	GRI code	Indicator
Materials	EN1-CORE	Materials used by weight or volume.
	EN2-CORE	Percentage of materials used that they are recycled input materials.
Energy	EN3-CORE	Direct energy consumption by primary energy source.
	EN4-CORE	Indirect energy consumption by primary source.
	EN5-ADD	Energy saved due to conservation and efficiency improvements.
	EN6-ADD	Initiatives to provide energy-efficient or renewable energy-based products and services and reduction in energy requirements as a result of these initiatives.
	EN7-ADD	Initiatives to reduce indirect energy consumption and reductions achieved.
Water	EN8-CORE	Total water withdrawal by source.
	EN9-ADD	Water sources significantly affected by withdrawal of water.
	EN10-ADD	Percentage and total volume of water recycled and reused.
Biodiversity	EN11-CORE	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.
	EN12-CORE	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.
	EN13-ADD	Habitats protected or restored.
	EN14-ADD	Strategies, current actions and future plans for managing impacts on biodiversity.

Category	GRI code	Indicator
	EN15-ADD	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.
Emissions, Effluents and Waste	EN16-CORE	Total direct and indirect greenhouse gas emissions by weight.
	EN17-CORE	Other relevant indirect greenhouse gas emissions by weight.
	EN18-ADD	Initiatives to reduce greenhouse gas emissions and reduction achieved.
Category	GRI code	Indicator
	EN19-CORE	Emissions of ozone-depleting substances by weight.
	EN20-CORE	NO, SO and other significant air emission by type and weight.
	EN21-CORE	Total water discharge by quality and destination.
	EN22-CORE	Total weight of waste by type and disposal method.
	EN23-CORE	Total number and volume of significant spills.
	EN24-ADD	Weight of transported, imported, exported or treated waste deemed hazardous, under the terms of the Basel Convention Annex I,II,III and IV, and percentage of transported waste shipped internationally.
	EN25-ADD	Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharge of water and runoff.
Product and Services	EN26-CORE	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.
	EN27-CORE	Percentage of products sold and their packaging materials that are reclaimed by category.
Compliance	EN28-CORE	Monetary value of significant fines and total number of non-monetary sanctions for non compliance with environmental laws and regulations.
Transport	EN29-ADD	Significant environmental impacts of transporting products and other goods

		and materials used for the organization's operations, and transporting members of the workforce.
Overall	EN30-ADD	Total environmental protection expenditures and investments by type.
LABOUR PRACTICES & DECENT WORK		
Category	GRI code	Indicator
Employment	LA1-CORE	Total workforce by employment type, employment contract and region.
	LA2-CORE	Total number and rate of employee turnover by age group, gender and region.
	LA3-ADD	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.
Labour/ Management Relations	LA4-CORE	Percentage of employees covered by collective bargaining agreements.
	LA5-CORE	Minimum notice period (s) regarding significant operational changes, including whether it is specified in collective agreements.
Occupational Health and Safety	LA6-ADD	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on occupational health and safety programs.
	LA7-CORE	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region.
	LA8-CORE	Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.
	LA9-ADD	Health and safety topics covered in formal agreements with trade unions.
Training and Education	LA10-CORE	Average hours of training per year per employee by employee category.
	LA11-ADD	Program for skills management and lifelong learning that support the continued employability of employees and assists them in managing career endings.

	LA12-ADD	Percentage of employees receiving regular performance and career development reviews.
Diversity and Equal Opportunity	LA13-CORE	Composition of governance bodies and breakdown of employees per category according to gender, age, group, minority group membership, and other indicators of diversity.
	LA14-CORE	Ratio of basic salary of men to women by employee category.
HUMAN RIGHTS		
Category	GRI code	Indicator
Investment and Procurement Practices	HR1-CORE	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.
	HR2-CORE	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.
	HR3-ADD	Total hours of employee's trainings on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.
Non-discriminant	HR4-CORE	Total number of incidents of discriminations and actions taken.
Freedom of Association and collective bargaining	HR5-CORE	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.
Child Labour	HR6-CORE	Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour.
Forced and Compulsory Labour	HR7-CORE	Operations identified as having significant risk for incidents of force or compulsory labour, and measures taken to contribute to the elimination of forced or compulsory labour.
Security Practices	HR8-ADD	Percentage of security personal trained in the organization's policies or

		procedures concerning aspects of human rights that are relevant to operations.
Indigenous Rights	HR9-ADD	Total number of incidents of violations involving rights of indigenous people and actions taken.
SOCIETY		
Category	GRI code	Indicator
Community	SO1-CORE	Nature, scope, and effectiveness of any programs, and practices that assess and manage the impact of operations on communities, including entering, operating, and existing.
Corruption	SO2-CORE	Percentage and total number of business units analysed for risks related to corruption.
Public Policy	SO3-CORE	Percentage of employees trained in organization's anti-corruption policies and procedures.
	SO4-CORE	Actions taken in response to incidents of corruption.
	SO5-CORE	Public policy positions and participation in public policy development and lobbying.
	SO6-ADD	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.
Anti-Competitive Behaviour	SO7-ADD	Total number of legal actions for anti competitive behaviour, antitrust, and monopoly practices and their outcomes.
Compliance	SO8-CORE	Monetary value of significant fines and total number of non monetary sanctions for non compliance with laws and regulations.
PRODUCT RESPONSIBILITY		
Category	GRI code	Indicator
Customer Health and Safety	PR1-CORE	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures
	PR2-ADD	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and

		safety impacts of products and services, by type of outcomes.
Product and Service Labelling	PR3-CORE	Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements.
	PR4-ADD	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and services information and labelling, by type of outcomes.
	PR5-ADD	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.
Marketing Communications	PR6-CORE	Program for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.
	PR7-ADD	Total number of incident of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.
Customer Privacy	PR8-ADD	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.
Compliance	PR9-CORE	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.

Source: GRI (2006)

Appendix B: Independent Sample T-test for Assurance Provider

As discussed in Chapter 4, Section 4.8 the sustainability reports' assurance provider can be categorised into two types. Some sustainability reports are assured by the auditing entities. Yet, others are assured by non-auditing profession. Table B-1 presents the result of the independent sample t-test for the 212 firms in the sample that had voluntary assurance. Whilst, audit firm assurance providers are linked to a slightly higher CSRD mean (68.3% as compared to 64.8%), there is no statistically significant difference regarding the extent of CSRD between both types of assurance provider (p-value=.269).

Table B-1 Independent Sample T-test for Assurance Provider

CSRD	Assurance Provider	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means		Mean Difference
				F	Sig.	T	Sig.	
	Audit Firm	113	68.3					
	Non Audit Firm	99	64.8					
Equal variances assumed				5.735	0.018	1.109	0.269	0.03506
Equal variances not assumed						1.098	0.274	0.03193

Appendix C: Independent Sample T-test for the CSR Committee Structure

As discussed in Chapter 4 Table 4.13). The structure of CSR committee can be further categorised into two categories. First, a CSR committee can be formed under the board of directors' control. The committee in this scenario has the responsibility to report all CSR affairs to the board. In the second scenario, a CSR committee is a part of the executive. The committee has responsibility to assist executive concerning CSR issues.

Table C-1 shows the result of independent sample t-tests. The test examines the difference of the extent CSRD in sustainability reports between companies which have the CSR committee structured under the board (average CSRD score of 69.2%) and executive (average score of 66.6%). The result indicates that there is no statistically significant difference in the level of CSRD between both of them (p-value=.577).

Table C.1 Independent Sample T-test for CSR Committee Structure

CSR	CSR Committee	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means		Mean Difference
				F	Sig.	T	Sig.	
	Board	85	69.2					
	Executive	32	66.6					
Equal variances assumed				0.075	0.784	.560	0.577	0.025795
Equal variances not assumed						.577	0.566	0.025795

Appendix D: Outliers

Table D.1 provides the results of outlier tests by using Mahalanobis and Cook's Distance scores. As mentioned in Chapter 5 Section 5.2 that with eight degrees of freedom and .001 level of confidence, the maximum Mahalanobis scores are 26.12 for the detection of possible outliers. Based on the Mahalanobis scores, Table D.1 shows three possible cases there are three observation exceed 26.12, these are observation number 17, 140, and 400 (see shaded areas in Table D.1). Thus, additional regression analysis is conducted (with and without outliers). Concerning the Cook's Distance score, the result show that all observations have Cook's Distance less than 1. Thus, there is no outlier observations using this techniques. The extra regression in Appendix E reveals no fundamental difference in the statistical results (with or without outliers). Therefore, the full sample is used for the prime thesis analysis.

Table D.1 Mahalanobis and Cook's Distance Scores

Obs	Mahalanobis	Cook's	Obs	Mahalanobis	Cook's	Obs	Mahalanobis	Cook's
1	8.33052	0.00037	156	4.07401	0.00022	311	6.48042	0.00234
2	7.72468	0.00006	157	4.24602	0.00271	312	9.62483	0.00005
3	12.56084	0.00061	158	8.60977	0.00442	313	6.68537	0.00056
4	5.42199	0.00237	159	6.54150	0.00040	314	6.41885	0.00598
5	7.44142	0.00441	160	20.44737	0.00070	315	11.09768	0.00052
6	18.42898	0.00694	161	12.64011	0.00335	316	6.24239	0.00501
7	7.35314	0.00182	162	13.87501	0.00182	317	5.35596	0.00295
8	5.74621	0.00326	163	6.49790	0.00003	318	3.82327	0.00107
9	5.23854	0.00067	164	7.33096	0.00100	319	6.81264	0.00090
10	13.02241	0.00206	165	10.13806	0.00711	320	3.85068	0.00025
11	3.98481	0.00079	166	11.59160	0.00132	321	5.41800	0.00555
12	17.89081	0.00009	167	9.13217	0.00082	322	24.12239	0.00013
13	7.49963	0.00344	168	9.22941	0.00168	323	5.41026	0.00006
14	10.11118	0.00538	169	11.66099	0.00803	324	4.56399	0.00178
15	5.32444	0.00063	170	7.01764	0.00598	325	4.85948	0.00414
16	25.15208	0.00013	171	8.56016	0.00432	326	5.64202	0.00029
17	28.97576	0.00115	172	10.79631	0.00010	327	5.70102	0.00038
18	7.49054	0.00012	173	6.18603	0.00014	328	4.23048	0.00226
19	11.35860	0.00272	174	6.33261	0.00241	329	3.77227	0.00034
20	17.69874	0.00108	175	4.58306	0.00051	330	6.28684	0.00869
21	5.25797	0.00291	176	6.08566	0.00027	331	3.54408	0.00015
22	7.87617	0.00547	177	4.86653	0.00132	332	5.93643	0.00195
23	12.55859	0.00490	178	5.69023	0.00021	333	7.20232	0.00000
24	8.57728	0.00412	179	6.70282	0.00164	334	4.54135	0.00182
25	7.42802	0.00223	180	4.26807	0.00094	335	7.56378	0.00419
26	8.03313	0.00028	181	3.91325	0.00003	336	7.07471	0.00402

27	4.26926	0.00220	182	7.45212	0.00083	337	4.67212	0.00061
28	12.48657	0.00225	183	3.77219	0.00090	338	5.14706	0.00190
29	4.56322	0.00040	184	5.50371	0.00070	339	8.17605	0.00037
30	12.28639	0.00002	185	3.30893	0.00193	340	13.87875	0.00189
31	3.93239	0.00000	186	3.67258	0.00074	341	8.72223	0.00000
32	5.43267	0.00018	187	4.15141	0.00073	342	11.58674	0.00001
33	7.71233	0.00135	188	5.82894	0.00035	343	6.10059	0.00026
34	4.90873	0.00090	189	7.20643	0.00202	344	6.74745	0.00004
35	5.28861	0.00241	190	6.64774	0.00019	345	7.90647	0.00097
36	5.86860	0.00025	191	7.38080	0.00089	346	16.04999	0.00588
37	8.03658	0.00001	192	9.42797	0.00004	347	6.70566	0.00036
38	6.81777	0.00265	193	9.02216	0.00037	348	6.82049	0.00076
39	4.49918	0.00008	194	5.61298	0.00245	349	10.15841	0.00002
40	10.99444	0.00729	195	8.55951	0.00292	350	5.99498	0.00138
41	14.96842	0.00138	196	6.66605	0.00050	351	5.98566	0.00033
42	12.04352	0.00118	197	9.91918	0.00065	352	7.07445	0.00089
43	7.94979	0.00147	198	9.75430	0.00333	353	23.75771	0.00397
44	11.92581	0.00050	199	4.02265	0.00044	354	8.49095	0.00131
45	16.55500	0.00096	200	8.14174	0.00051	355	8.73466	0.00084
46	10.13598	0.00004	201	8.63876	0.00040	356	12.15580	0.01344
47	6.78857	0.00565	202	4.77165	0.00000	357	8.35184	0.00134
48	8.21077	0.00409	203	8.72745	0.00179	358	4.18652	0.00213
49	19.25874	0.00272	204	9.62391	0.00004	359	9.13922	0.00593
50	7.51678	0.00002	205	5.57686	0.00000	360	8.69875	0.00002
51	10.08766	0.00185	206	7.20798	0.00077	361	6.42786	0.00913
52	6.90563	0.00290	207	9.57078	0.00270	362	6.90702	0.00018
53	4.67563	0.00073	208	6.11927	0.00000	363	9.87559	0.00057
54	19.26589	0.00933	209	7.90403	0.00009	364	8.10965	0.00823
55	4.28636	0.00021	210	10.94707	0.00405	365	6.07076	0.00042
56	9.16162	0.00066	211	10.45382	0.00192	366	6.61723	0.00224
57	11.37795	0.00096	212	6.97129	0.00218	367	11.51487	0.00000
58	6.94858	0.00247	213	11.02502	0.00323	368	11.10241	0.00199
59	8.98762	0.01383	214	8.32862	0.00002	369	5.35774	0.00890
60	9.94695	0.01434	215	7.59915	0.00560	370	6.82315	0.00550
61	9.13214	0.00670	216	6.76065	0.00077	371	4.68788	0.00155
62	11.46519	0.01002	217	5.96369	0.00183	372	4.18741	0.00037
63	10.08510	0.00247	218	6.87067	0.00016	373	4.94449	0.01038
64	9.14912	0.00646	219	11.41618	0.00702	374	11.16748	0.00488
65	6.77168	0.00138	220	4.64964	0.00084	375	8.46499	0.00194
66	9.78923	0.00073	221	5.14925	0.00191	376	6.95999	0.00017
67	7.22210	0.00000	222	5.72850	0.00077	377	8.98495	0.00056
68	9.97514	0.00006	223	3.81980	0.00181	378	13.42668	0.01074
69	6.42260	0.00678	224	5.21479	0.00359	379	15.93120	0.00075
70	15.19506	0.00811	225	7.47632	0.00195	380	6.17669	0.00154
71	6.48531	0.00262	226	5.45073	0.00287	381	8.47172	0.00143
72	7.76991	0.00062	227	3.97360	0.00009	382	7.43832	0.00615

73	6.27537	0.00031	228	5.46576	0.00043	383	4.99981	0.00001
74	5.42242	0.00520	229	4.96238	0.00042	384	8.62611	0.00507
75	7.40230	0.00310	230	8.84931	0.00034	385	14.46128	0.00152
76	5.40244	0.00000	231	4.57844	0.00639	386	7.40466	0.00068
77	7.53049	0.00123	232	5.33836	0.00213	387	7.02881	0.00428
78	6.71557	0.00689	233	3.79698	0.00075	388	5.43081	0.00090
79	9.20899	0.00002	234	3.80584	0.00008	389	4.71879	0.00035
80	6.60706	0.00074	235	8.26696	0.00070	390	6.31000	0.00253
81	11.25627	0.00297	236	9.50347	0.00203	391	4.49916	0.00969
82	9.17638	0.00187	237	7.58584	0.00257	392	6.13808	0.00005
83	6.43038	0.00001	238	4.68732	0.00130	393	8.80852	0.00059
84	10.89109	0.00722	239	4.75851	0.00298	394	6.92153	0.00101
85	11.24259	0.00036	240	4.03468	0.00003	395	5.74364	0.00484
86	9.48367	0.00343	241	7.49017	0.00598	396	5.65911	0.00007
87	7.90379	0.00405	242	7.17684	0.00025	397	5.88699	0.00127
88	12.27499	0.00000	243	7.18047	0.00933	398	6.32133	0.00168
89	7.27633	0.00889	244	7.58871	0.00250	399	5.76041	0.00094
90	8.67102	0.00558	245	7.43527	0.00269	400	26.58879	0.00814
91	12.00835	0.00600	246	4.71851	0.00231	401	6.01889	0.00013
92	7.85553	0.00577	247	6.33966	0.00048	402	7.01324	0.00000
93	10.88334	0.01031	248	10.16741	0.00046	403	9.30030	0.00183
94	14.46973	0.00000	249	3.70709	0.00019	404	6.44219	0.00027
95	6.10926	0.00026	250	5.11102	0.00050	405	7.68706	0.00006
96	9.63172	0.00042	251	5.91843	0.00013	406	4.03394	0.00239
97	10.46725	0.00645	252	5.07134	0.00021	407	8.78272	0.00531
98	7.02513	0.00583	253	7.50546	0.00464	408	7.04222	0.00236
99	7.11641	0.00070	254	4.09719	0.00082	409	4.72802	0.00020
100	6.56916	0.00031	255	14.91900	0.00586	410	6.44704	0.00005
101	6.09221	0.00195	256	9.87976	0.00000	411	8.12758	0.00676
102	5.29583	0.00107	257	3.97211	0.00017	412	4.99167	0.00021
103	5.79007	0.00001	258	10.98125	0.00233	413	6.73516	0.00050
104	6.59414	0.00790	259	6.35481	0.00104	414	4.30495	0.00054
105	12.76205	0.00415	260	6.90827	0.00056	415	11.77279	0.00326
106	17.16384	0.00056	261	5.99681	0.00287	416	6.49619	0.00123
107	6.78069	0.00000	262	9.94579	0.00000	417	11.35787	0.00039
108	4.92806	0.00046	263	11.12383	0.00000	418	11.54986	0.00226
109	4.38655	0.00031	264	6.39802	0.00105	419	5.77040	0.00466
110	10.29391	0.00171	265	8.50584	0.00183	420	4.35134	0.00072
111	3.35335	0.00007	266	12.88843	0.00001	421	7.04225	0.00070
112	4.66985	0.00184	267	6.47787	0.00055	422	9.69338	0.01736
113	7.60241	0.00313	268	9.00920	0.00069	423	8.68410	0.01476
114	6.57811	0.00000	269	10.37781	0.00014	424	8.17309	0.00292
115	8.58679	0.00007	270	13.75474	0.00560	425	6.99451	0.00036
116	3.36004	0.00170	271	15.74297	0.00055	426	8.79523	0.00236
117	6.17581	0.00225	272	11.12884	0.00318	427	7.66883	0.00049
118	4.16463	0.00326	273	9.60657	0.00319	728	6.92431	0.00309

119	6.30710	0.00090	274	8.45522	0.00438	429	4.00640	0.00067
120	7.54557	0.00043	275	12.83048	0.00012	430	6.98777	0.00160
121	9.20517	0.00799	276	5.79126	0.00014	431	5.91901	0.00207
122	9.44020	0.01417	277	5.22700	0.00211	432	6.75299	0.00096
123	3.58471	0.00150	278	6.25592	0.00114	433	5.20699	0.00209
124	8.49238	0.00077	279	6.53102	0.00051	434	6.85719	0.00393
125	13.31431	0.00790	280	5.73081	0.00066	435	7.79710	0.00000
126	4.57684	0.00279	281	4.24104	0.00119	436	7.56386	0.00009
127	6.59111	0.00096	282	5.94318	0.00406	437	6.34222	0.00332
128	7.25066	0.00021	283	4.11850	0.00218	438	5.54453	0.00029
129	4.28537	0.00258	284	4.96058	0.00016	439	6.90303	0.00000
130	6.64015	0.00013	285	4.03097	0.00019	440	4.06986	0.00010
131	6.83789	0.00071	286	9.29988	0.00195	441	8.97849	0.00422
132	5.75937	0.00001	287	6.61216	0.00001	442	6.26717	0.00075
133	6.08089	0.00002	288	4.55947	0.00118	443	8.43782	0.00005
134	6.40786	0.00072	289	7.77158	0.00053	444	4.94822	0.00437
135	4.72355	0.00207	290	13.08689	0.00325	445	5.29767	0.00064
136	5.18666	0.00047	291	9.05068	0.00191	446	8.17719	0.00098
137	4.04996	0.00146	292	6.91780	0.00012	447	8.17256	0.00028
138	5.34285	0.00016	293	3.77277	0.00015	448	6.19468	0.00415
139	4.35122	0.00075	294	13.06899	0.00907	449	8.41332	0.00667
140	109.51911	0.01927	295	6.43924	0.00008	450	8.35301	0.00277
141	4.87116	0.00002	296	5.06555	0.00031	451	4.89016	0.00490
142	6.91035	0.00069	297	16.54443	0.00048	452	7.26245	0.00002
143	7.07235	0.00005	298	4.03188	0.00077	453	6.93886	0.00004
144	4.94617	0.00008	299	8.77003	0.00038	454	10.31743	0.01518
145	5.34666	0.00292	300	5.14262	0.00005	455	7.68214	0.00024
146	6.55560	0.00050	301	9.03078	0.00012	456	7.36138	0.00050
147	8.20224	0.00000	302	10.24587	0.00230	457	9.26162	0.00003
148	9.35730	0.00008	303	4.64187	0.00258	458	4.90633	0.00135
149	4.57924	0.00005	304	4.85361	0.00015	459	5.08863	0.00006
150	8.55821	0.00001	305	5.07356	0.00044	460	4.61095	0.00002
151	10.39252	0.00361	306	5.75690	0.00171	-	-	-
152	5.41249	0.00128	307	5.72148	0.00055	-	-	-
153	9.08844	0.00005	308	5.06369	0.00445	-	-	-
154	5.71173	0.00001	309	3.82692	0.00334	-	-	-
155	8.35159	0.00319	310	3.73632	0.00225	-	-	-

Appendix E: Regression Analysis with and without the outliers

As stated in Chapter 5, Section 5.2) and Appendix D, extreme cases (outliers) may have considerable impact on the regression results and should be deleted or modified to reduce their influence (Coakes 2009). This appendix presents the results of multiple regression analysis with and without outliers (see Appendix D for more details). The tests are conducted to better assess the possible impact of outliers on regression results. Appendix D highlights three possible outliers. Therefore, Table E.1 and E.2 regression models are run to assess possible differences with (Table E.1) and without (Table E.2) outliers.

Table E.1: Multiple regression full sample (N = 460)

Independent Variables	Coefficient	t-value	p-value
Constant	.358	5.433	.000***
Firm Size (log employee)	.007	.466	.641
Industry Type	.046	2.147	.032**
Presence of Assurance	.170	8.043	.000***
Communitarian	.042	1.708	.088*
Emerging Market	.068	2.402	.017**
Presence of CSR Committee	.060	2.441	.015**
Leverage	.047	.867	.387
Profitability (ROA)	.046	.270	.787
Adjusted R ²	.165		
F-statistic	12.314		
p-value	.000		
N	460		

Legend: CSRD is the dependent variable. *, **, *** significant at the 0.10, 0.05, and 0.01 level.

Table E.2: Multiple regression without outliers (N = 457)

Independent Variables	Coefficient	t-value	p-value
Constant	.335	4.082	.000***
Firm Size (log employee)	.011	.673	.501
Industry Type	.048	2.189	.029**
Presence of Assurance	.172	8.129	.000***
Communitarian	.042	1.694	.091*
Emerging Market	.065	2.275	.023**
Presence of CSR Committee	.060	2.438	.015**
Leverage	.051	.910	.364
Profitability (ROA)	.187	.042	.367
Adjusted R ²	.167		
F-statistic	12.463		
p-value	.000		
N	457		

Legend: CSRD is the dependent variable. *, **, *** significant at the 0.10, 0.05, and 0.01 level.

Based on the results from Tables E.1 and E.2, it can be seen that there is no fundamental statistical difference between the regression with (n=460) and without (n=457) outliers. First, all the coefficient for the predictor variables are similar (positive). Second, all the levels of statistical significances (p-value) of predictor variables do not differ before and after the outliers removed. The results are virtually identical. Thus, this thesis uses the full sample (N = 460) in the main regression analysis.

Appendix F: Notable International Guidance for Sustainability Reporting

As discussed in Chapter Six, there are some other notable international guidelines concerning sustainability reporting. These are:

F.1 The Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises (2011).

This guidelines include Section III on “Disclosure”, which encourages timely, regular, reliable and relevant disclosure on financial and non-financial performance, including environmental and social issues (OECD 2011).

F.2 The United Nations (UN) Global Compact (2007).

The UN Global Compact is the world’s largest voluntary corporate citizenship initiative and provides a framework for organisations that are committed to align their operations and strategies with 10 principles in the areas of human rights (2 principles), labour (4 principles), environment (3 principles), and anti-corruption (1 principle).

F.3 UN Principles for Responsible Investment (UNPRI) (2007).

UNPRI is an investor initiative in partnership with the United Nations Environment Programme (UNEP) Finance Initiative and the UN Global Compact. It consists of a set of voluntary best practice principles to assist investors in integrating environmental, social and corporate governance (ESG) issues into investment processes and ownership practices. The UNPRI (2007) principles are developed by an international institutional investor group. There are six principles reflecting environmental, social, and corporate governance issues.

F.4 The Coalition for Environmentally Responsible Economies (CERES) Principles (2010).

The CERES (2010) principles are a model corporate code of environmental conduct created by the Coalition for Environmentally Responsible Economies (CERES), a coalition of investors, public pension trustees, foundations, labour unions, and environmental religious, and public interest groups. The CERES principles have ten-point code of conduct and specific environmental reporting guidelines. These are:

- Protection of the biosphere.
- Sustainable of use natural resources.
- Reduction and disposal of wastes.
- Energy conservation.
- Risk reduction.

- Safe product and services.
- Environmental restoration.
- Informing public.
- Management commitment.
- Audit reports.

F.5 The International Organisation for Standardisation (ISO) (2010).

The ISO 26000 is the latest standard concerning international guidance on Social Responsibility. The standard states that to be accountable an organisation should at appropriate intervals report significant impacts related to social responsibility to concerned stakeholders.

F.6 The Social Accountability (SA) 8000 (2008).

The SA 8000 standard is a voluntary, universal and auditable standard for decent work conditions that was developed by Social Accountability International, a multi-stakeholder Non-Government Organisations (NGOs) initiative. The SA8000 standard is based on the core conventions of the International Labour Organisation, the United Nations Convention on the Rights of the Child, and the Universal Declaration of Human Rights. The SA8000 standards are including child labour, forced and compulsory labour, health and safety, freedom of association and right to collective bargaining, discrimination, disciplinary practices, working hours, remuneration, and management systems.